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REGISTRANT'S NAME

Vantech (VRB) Technology Corp.

*CURRENT ADDRESS

Suite 1645-701 West Georgia St.
Vancouver, B.C. V7Y 1C6

**FORMER NAME

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**NEW ADDRESS

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FISCAL YEAR

6/30/01

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ANNUAL INFORMATION FORM ("AIF")

ITEM 1 - COVER PAGE

Corporate Name Vanteck (VRB) Technology Corp.

Date of AIF: February 1, 2002

Date of Latest
Financial Year End: June 30, 2001

ITEM 2 - CORPORATE STRUCTURE

The name of the Issuer is **Vanteck (VRB) Technology Corp**

The Issuer was incorporated under the Canada Business Corporations Act on November 13, 1986 under the name "Senn D'Or Inc." Pursuant to Articles of Amendment dated September 16, 1992, the Issuer was authorized to issue up to 10,000,000, 8% non-cumulative, redeemable non-voting Class "B" Shares with a stated capital of \$0.001 (the 'Class "B" Shares'). Effective August 27, 1993, the Issuer, changed its name to "Venoro Gold Corp." and subdivided its issued share capital on the basis of three common shares of Venoro Gold Corp. for each issued common share of Senn D'Or Inc. Effective December 3, 1997, the Issuer changed its name to "New Venoro Gold Corp." and consolidated its share capital on the basis of eight common shares for one new common share. Effective January 28, 2000, the Issuer amended its articles to change the designation of the existing Class "A" voting shares without nominal or par value to Common Shares without par value and to rescind the authority to issue Class "B" non-voting shares. On May 1, 2000, the Issuer changed its name to Vanteck (VRB) Technology Corp.

The registered and head office of the Issuer is located at Suite 1600 - 999 West Hastings Street, Vancouver, B.C., V6C 2W2, PH: (604) 633-4367, FAX: (604) 669-1605.

The address for service of the Issuer is care of Brown McCue, Barristers & Solicitors, Suite 1650, 999 West Hastings Street, Vancouver, BC, V6C 2W2.

The Issuer is the holder of 100% of the issued capital of Vanteck International Limited, a British Virgin Islands company incorporated on March 24, 2000. The registered office of Vanteck International Limited is P.O. Box 71, Road Town, Tortola, BVI. The Issuer has no other subsidiaries.

The Issuer is the holder of 73.55% of the issued ordinary shares of Pinnacle VRB Limited ("Pinnacle") a company whose shares are listed on the Australian Stock Exchange. The registered office of Pinnacle is Level 6, 140 Queen Street, Melbourne, Victoria 3000, Australia.

ITEM 3 - GENERAL DEVELOPMENT OF THE BUSINESS

Effective June 30, 2000, the Issuer changed its financial year end from October 31st to June 30th. The following discussion relates to the financial year ended October 31, 1999, the 8 month period ended June 30, 2000, the financial year ended June 30, 2001 and the 3 month period ending September 30, 2001.

Prior to the financial year ended October 31, 1999, the Issuer was engaged in the exploration and evaluation of mineral properties. In the financial year ending October 31, 1997, the Issuer's resource properties were written off to deficit and abandoned. During the financial years ended October 31, 1997, 1998 and 1999, no funds were spent on account of mineral exploration. In the financial year ending October 31, 1999, the Issuer determined not to proceed in the mineral resource business. By agreement dated October 26, 1999 entered into with Federation Resources N.L. ("Federation") the Issuer acquired the right to exploit and utilize the All Vanadium Redox Battery ("VRB") within the continent of Africa. Federation is an Australian Stock Exchange listed company. As a result of the acquisition, Federation acquired a position of control in the Company.

Fiscal 1999 commenced on November 1, 1998. During fiscal 1999, the following material events occurred:

1. On May 21, 1999, the Issuer issued 2,185,813 common shares at a price of \$0.15 per share in settlement of \$327,871.95 of debt; and
2. On October 26, 1999, the Issuer entered into a Transfer of Technology Agreement (the "Acquisition Agreement") with Federation to acquire from Federation an assignment of Federation's exclusive right to exploit and utilize the All Vanadium Redox Battery ("VRB") within the continent of Africa (47 countries) in consideration of:
 - i) the issuance of 5,000,000 common shares of the Issuer to Federation, at a deemed price of \$0.18 per share representing an aggregate value of CDN \$900,000.00; plus
 - ii) the issuance of a further 5,000,000 common shares of the Issuer subject to performance escrow share restrictions imposed by Local Policy 3-07 of the British Columbia Securities Commission ("Performance Shares") at a deemed price of \$0.01 per share.

At the October 31, 1999 conclusion to fiscal 1999, 4,764,070 Class "A" shares were issued and outstanding and no incentive options or share purchase warrants were outstanding.

As a result of the change in the financial year end from October 31st to June 30th, fiscal 2000 commenced on November 1, 1999 and ended eight months thereafter on June 30, 2000. During Fiscal 2000, the following material events occurred:

1. On January 6, 2000, the Issuer completed a non-brokered private placement of 1,333,333 Special Warrants ("January Special Warrants") at a price of \$0.15, resulting in gross proceeds to the Issuer of \$200,000. Each Special Warrant consisted of one common share and one non-transferable Series "A" Share Purchase Warrant to acquire one additional common share. Each Series "A" Warrant is exercisable at a price of \$0.30 per share up to January 6, 2001 and at a price of \$0.35 up to January 6, 2002. These warrants were exercised as to 100,000 on November 17, 2001 and the balance of 1,233,333 on January 3, 2002;
2. On January 10, 2000 Peter A. Stedwell and R. John Fraser were appointed to the Board of the Issuer as Federation's representatives;

3. Effective January 28, 2000, the Issuer amended its articles to change the designation of the existing Class "A" voting shares without nominal or par value to Common Shares without par value and to rescind the authority to issue Class "B" non-voting shares;
4. On February 16, 2000, the Issuer entered into an Agency Agreement with Pacific International Securities Ltd. (the "Agent") to offer through the facilities of the Exchange 2,400,000 units of the Issuer at a price of \$0.50 per Unit;
5. On March 3, 2000 the Issuer entered into a Heads of Agreement with Highveld Steel and Vanadium Corporation Limited of Witbank, South Africa to form a 50/50 joint venture strategic alliance with respect to the production of vanadium electrolyte, among other things, for use in VRB's;
6. On March 14, 2000 the Issuer entered into an Escrow Agreement with Federation Resources N.L. for the issuance of 5,000,000 shares to be subject to escrow share restrictions ("Performance Shares");
7. On April 4, 2000 the Issuer completed a non-brokered private placement of 700,000 Special Warrants ("April Special Warrants") at \$0.50 per Special Warrant resulting in gross proceeds to the Issuer of \$350,000 with each Special Warrant being convertible into one common share;
8. On April 19, 2000 the Issuer entered into an agreement with its subsidiary, Vanteck International Limited regarding the acquisition of the VRB by the subsidiary in return for the agreement of the Subsidiary to pay the Issuer \$950,000 over an unspecified period, bearing interest at a rate of 6% per annum;
9. On April 20, 2000, the Issuer entered into an Investor Relations Agreement with Global Link Capital Corporation and Gregory Pearson, pursuant to which Global Link Capital Corporation through Mr. Pearson agreed to provide investor relations services to the Issuer in return for a monthly remuneration of \$3,500, plus out of pocket expenses;
10. On April 26, 2000, the Issuer completed the acquisition of an assignment of Federation's exclusive right to exploit and utilize the VRB by issuing 5,000,000 common shares (at a deemed price of \$0.18 per share) and an additional 5,000,000 Performance Shares (at a deemed price of \$0.01 per share) to Federation;
11. On May 1, 2000, the Issuer changed its name to Vanteck (VRB) Technology Corp.;
12. On May 2, 2000, 140,625 shares held within escrow were cancelled in accordance with paragraph 12 of the Escrow Agreement.
13. On May 9, 2000 the Issuer granted 1,940,000 incentive options, exercisable at a price of \$0.50 per share, expiring May 9, 2005; and
14. Effective June 30, 2000, the Issuer changed its year end from October 31st to June 30th.

At the June 30, 2000 conclusion to fiscal 2000, 14,623,445 common shares were issued and outstanding, plus an additional 1,333,333 Special Warrants ("January Special Warrants") exchangeable into an additional 1,333,333 common shares and 1,333,333 Series "A" Share Purchase Warrants, plus an additional 700,000 Special Warrants ("April Special Warrants") exchangeable into an additional 700,000 common shares. At June 30, 2000 the following incentive options and share purchase warrants were outstanding:

Description	Number	Exercise Price	Expiry
Incentive Stock Options	1,940,000	\$0.50	May 9, 2005
Series "A" Warrants*	1,333,333	\$0.30	January 6, 2001
		\$0.35	January 6, 2002

* These warrants were exercised as to 100,000 on November 17, 2001 and the balance of 1,233,333 on January 3, 2002.

Fiscal 2001 commenced on July 1, 2000 and expired June 30, 2001. During fiscal 2001, the following material events occurred:

1. On July 26, 2000, the Issuer completed a Prospectus Offering and issued the following securities:
 - i) 2,400,000 units of the Issuer at a price of \$0.50 per Unit. Each Unit consisted of one common share and one non-transferable Series "B" Share Purchase Warrant with each Series "B" Warrant entitling the holder to acquire one additional common share at a price of \$0.75 per share up to and including January 26, 2001 and at a price of \$1.00 per share up to and including July 26, 2001.
 - ii) Share purchase warrants ("Agent's Warrant") were issued to the Agent, entitling it to acquire up to an additional 360,000 common shares exercisable on the same terms as the Series "B" Warrants;
 - iii) 50,000 common shares to the Agent as a corporate finance fee; and
 - iv) 366,667 shares to Saginel Holdings PTY Ltd. in payment of a finder's fee incidental to the acquisition from Federation of the VRB rights;
2. On July 26, 2000 the January Special Warrants were exchanged into 1,333,333 common shares and 1,333,333 Series "A" Warrants and the April Special Warrants were exchanged into 700,000 common shares;
3. On September 15, 2000, the Issuer retained Telepower Australia Ltd. ("Telepower") to provide ongoing technical consulting services;
4. On October 3, 2000, 150,000 incentive stock options were exercised, on June 8, 2001, 10,000 incentive stock options were exercised and on June 26, 2001, 5,000 incentive stock options were exercised by employees and consultants of the Issuer, to raise a total of \$88,500;

(5)

5. On January 19, 2001, the Issuer reached an agreement with its controlling shareholder, Federation Group Limited ("Federation"), to acquire its interest in the issued shares and options of Pinnacle VRB Limited ("Pinnacle") that in aggregate represented 19.99% of the then issued capital of Pinnacle. In exchange, the Issuer paid Federation \$1,250,000 and issued 3,000,000 treasury shares to Federation at a deemed price of \$1.00 per share;
6. On January 25, 2001 and February 8, 2001 the Issuer completed a brokered private placement of a total of 2,000,000 units at a price of \$1.00 per unit ("Unit") to raise proceeds before commission of \$2,000,000. Each Unit consisted of one share and one non-transferable share purchase Warrant (1,388,000 Series "D" Warrants and 612,000 Series "F" Warrants). Each Warrant is exercisable over a period of one year from the respective closing dates at an exercise price of \$1.00 per share. Pacific International Securities Inc acted as agent ("Agent") in this private placement and received a commission equal to seven and one half percent (7½%) on the funds raised on the private placement, paid for by \$67,639 in cash and 82,361 in shares. In addition, the Agent also received Series "G" non-transferable share purchase warrants entitling the Agent to purchase up to 320,000 common shares (or 16% of the brokered private placement amount) for a period of one year from the date of closing, at an exercise price of \$1.00. The Agent also received 50,000 Units as a corporate finance fee consisting of one common share and one Series "H" share purchase warrant;
7. On January 25, 2001 and February 8, 2001 the Issuer also completed a non-brokered private placement of an aggregate of 325,000 Units at a price of \$1.00 per Unit to raise total proceeds of \$325,000. 225,000 Units were issued January 25, 2001 consisting of one share and one Series "C" share purchase warrant and 100,000 Units were issued February 8, 2001, consisting of one share and one Series "E" share purchase warrant. Each of the foregoing warrants is non-transferable and exercisable over a period of one year from the respective closing dates at an exercise price of \$1.00 per share;
8. During the fiscal year ended June 30, 2001, an aggregate of 1,791,000 shares were issued on exercise of outstanding share purchase warrants to raise \$1,438,000.

At the June 30, 2001 conclusion of fiscal 2000, 26,986,806 common shares were issued and outstanding and incentive stock options and share purchase warrants were outstanding as follows:

Description	Number	Exercise Price	Expiry Date
Incentive Stock Options	1,790,000	\$0.50	May 9, 2005
	210,000	\$0.90	December 7, 2005
Share Purchase Warrants			
Series "A"	1,233,333	\$0.35	January 6, 2002
Series "B"	954,800	\$1.00	July 26, 2001
Series "C"	225,000	\$1.00	January 25, 2002
Series "D"	1,388,000	\$1.00	January 25, 2002
Series "E"	100,000	\$1.00	February 7, 2002
Series "F"	612,000	\$1.00	February 7, 2002

Description	Number	Exercise Price	Expiry Date
Series "G"	320,000	\$1.00	February 7, 2002
Series "H"	50,000	\$1.00	February 7, 2002
Agent's Warrants	14,200	\$1.00	July 26, 2001

Subsequent to the fiscal year ended June 30, 2001, the following material events occurred:

1. On July 20, 2001, the Issuer commenced an arm's length takeover bid for all of the issued ordinary shares of Pinnacle and filed a bidder's statement and offer document (offering one share of the Issuer in exchange for every 4 ordinary shares of Pinnacle) with the Australian Securities and Investment Commission. On December 5, 2001 the bid was closed. A total of 8,596,788 shares of the Issuer were issued to shareholders of Pinnacle in exchange for a total of 34,387,268 shares of Pinnacle.

As a result of the bid and of the acquisition of Pinnacle shares from Federation pursuant to the foregoing January 19, 2001 agreement, the Issuer holds 73.55% of the currently issued Pinnacle ordinary shares;

2. During the period July 1, 2001 to December 31, 2001, an aggregate of 1,154,000 shares were issued on exercise of outstanding share purchase warrants to raise \$1,154,000 and 15,000 shares were issued on exercise of outstanding incentive stock options to raise an additional \$13,500;
3. Incentive stock options were exercised by an employee of the Issuer as to 5,000 on July 31, 2001 and 10,000 on November, 21, 2001;
4. On December 18, 2001, the Issuer received Canadian Venture Exchange acceptance to the extension of the exercise terms of the following Series "C", "D", "E", "F", "G" and "H" share purchase warrants as follows:

Description	Number of Warrants	Old Expiry Date	New Expiry Date	Old Exercise Price	New Exercise Price
Series "C"	225,000	Jan 25, 2002	Jan 25, 2003	\$1.00	\$1.16
Series "D"	1,388,000	Jan 25, 2002	Jan 25, 2003	\$1.00	\$1.16
Series "E"	100,000	Feb 7, 2002	Feb 7, 2003	\$1.00	\$1.16
Series "F"	607,000	Feb 7, 2002	Feb 7, 2003	\$1.00	\$1.16
Series "G"	190,000	Feb 7, 2002	Feb 7, 2003	\$1.00	\$1.16
Series "H"	50,000	Feb 7, 2002	Feb 7, 2003	\$1.00	\$1.16

5. On December, 20, 2001, the Company announced that its shares were accepted for listing on the Frankfurt Stock Exchange in Germany under the trading symbol ("V NK").

As at February 1, 2002, the following are particulars of the Issuer's share capital:

Issued:

(7)

- (a) 37,985,927 common shares.

Shares Reserved for Issuance

- (b) **Warrants Outstanding:**

Description	Number	Exercise Price	Expiry Date
Series "C"	225,000	\$1.16	January 25, 2003
Series "D"	1,388,000	\$1.16	January 25, 2003
Series "E"	100,000	\$1.16	February 7, 2003
Series "F"	607,000	\$1.16	February 7, 2003
Series "G"	190,000	\$1.16	February 7, 2003

- (c) **Incentive Stock Options Outstanding:**

Number of Directors, Officers & Employees	Total Number of Options Granted	Exercise Price	Expiry Date
Directors / Officers (5) Employees / Consultants (3)	1,790,000	\$0.50	May 9, 2005
Employees / Consultants (2)	195,000	\$0.90	Dec 7, 2005
	1,985,000		

- (d) **Other Outstanding Commitments to Issue Securities:**

Federation holds a pre-emptive right to participate in any future equity financing of the Issuer at the same issue price and terms as generally applicable to any future financing, so as to enable Federation to maintain its percentage equity interest in the issued capital of the Issuer at least to the amount currently held by Federation (34.45%).

Save and except as aforesaid, there are no material changes in the business of the Issuer that are expected as at the date of this Annual Information Form.

Reference is made to the heading "Investment Risks" elsewhere in this Annual Information Form for a discussion of risks applicable to the Issuer and its business.

ITEM 4 - NARRATIVE DESCRIPTION OF THE BUSINESS

The Issuer is an electrochemical storage company that is commercializing a vanadium energy storage system technology which converts chemical energy into electrical energy based on the Vanadium Redox regenerative fuel cell. The Issuer holds an exclusive license to the Vanadium Redox technology for the continent of Africa and through majority control of the holder of the intellectual property rights and underlying patents, Pinnacle VRB Limited, the Issuer holds the world rights to the technology, subject to existing licenses and agreements.

The VRB is a unique patented electrochemical "Energy Storage" technology with technical performance characteristics and cost competitiveness against conventional energy storage technologies such as lead-acid and nickel-cadmium battery technologies. The VRB technology is most suited to stationary energy storage applications.

Stationary applications include power stations, the telecommunications sector (power back-up systems) and alternative energy generators such as wind farms. As electricity cannot be stored on a large scale, power stations for example, require expensive surplus generating and distribution capacity to meet peak demand. In the Power Industry sector the VRB is a new enabling technology that can effectively store electricity on demand. The VRB improves power reliability, power quality and will reduce costs for such applications as load leveling, peak shaving etc. as well as providing essential Uninterruptible Power Supply ("UPS").

The technology of the Issuer includes VESS, a proprietary advancement of the basic VRB technology developed by the Issuer and Telepower Australia. VESS integrates the VRB into a flexible energy storage system through exploiting the attributes of the VRB by optimized automated intelligent control and operational management electronics. VESS allows practical energy storage for new applications not before thought cost effective or achievable with lead-acid technology as well as pending beneficial replacement options for existing DC power infrastructure. The TSI-Eskom VRB system is designed to show the versatile configuration and operation of VESS, with the single installation demonstrating applications ranging from sub-second UPS ride-through capability through to power quality and emergency power back-up. The TSI-Eskom VRB-VESS system has been integrated with Eskom's new PCS programmable inverter technology also demonstrated during the formal VRB-VESS system launch.

Transfer of Technology License Agreement with Federation Resources NL ("Federation")

On April 26, 2000, the Issuer completed the acquisition of the exclusive right to exploit and utilize the All Vanadium Redox Battery ("VRB") within the continent of Africa (47 countries).

The Issuer's right to exploit and utilize the VRB within Africa is subject to a non exclusive right previously granted to Mitsubishi Petrochemical Company Limited and Kashima Kita Electric Power Corporation of Japan (collectively "Mitsubishi") to utilize the VRB technology for certain stationary applications, namely (i) on grid load leveling; (ii) non-grid interactive stationary dwelling with photo voltaics; and (iii) non-grid industrial and commercial site applications.

The Issuer acquired its interest in the VRB through its wholly-owned subsidiary, Vanteck International Ltd. (the "Subsidiary") in return for the agreement of the Subsidiary to pay the Issuer \$950,000 over an unspecified period. The foregoing \$950,000 bears interest at the rate of 6% per annum and is the subject of an agreement between the Issuer and the Subsidiary dated April 19, 2000.

The Federation Transaction Background

The University of New South Wales in Australia researched, developed and patented the VRB technology. Through its commercial arm Unisearch Limited ("Unisearch"), it entered into an agreement dated March, 1998 with Pinnacle VRB Limited ("Pinnacle") (an Australian Stock Exchange listed public company), wherein Unisearch transferred to Pinnacle all right, title and interest in the VRB patent, ownership and technology, including the intellectual property (patents and pending applications to numerous

countries, including the U.S.A., Canada, Japan, South Africa and Australia, and the right to apply in any other country) and know-how (written and electronic information and drawings) relative to the VRB.

Subsequently Pinnacle, with the consent of Unisearch, entered into an agreement dated February 15, 1999 with Federation (the "License Agreement") granting Federation the right to exploit and utilize the VRB within the Continent of Africa (47 countries).

Under the terms of the License Agreement, a commitment fee of Aus.\$250,000 was paid by Federation to Pinnacle in June, 1999. Thereafter an Annual License fee of Aus.\$250,000 is due and payable by June of each year over the initial 25 year term, less any royalties paid during the previous twelve (12) month period. Under the terms of the Acquisition Agreement, the Issuer has assumed these obligations of Federation to Pinnacle.

The royalties payable by the Issuer to Pinnacle are:

- Five percent (5%) of sub license fees received;
- Five percent (5%) of gross sales not including sub license fees or royalties from sub licensees gross sales; and
- Five percent (5%) of the sub licensees' gross sales.

The royalties are due and payable 30 days after the end of each quarter. An additional term of the License Agreement is that sub-licenses may be granted by the holder of the license with the consent of Pinnacle, not to be unreasonably withheld. The term of the License Agreement may be renewed for an additional 25 years at the Issuer's option.

Effective December 5, 2001, the Issuer completed its take over bid for the ordinary shares of Pinnacle, resulting in the Issuer acquiring 81.25% of the issued ordinary shares. Accordingly, Pinnacle is now a "subsidiary" of the Issuer as that term is defined in the Securities Act (British Columbia).

The Vanadium Redox Battery ("VRB")

The VRB is an electrochemical energy storage technology that has been demonstration tested in the Japanese market and is now as reported by Pinnacle, undergoing commercial sales in Japan by Sumitomo Electric Industries Ltd. ("SEI"). SEI was granted a license for stationary applications in Japan by Pinnacle in August, 1999. The VRB is most suited to stationary battery applications, such as emergency standby for the telecommunications sector, providing Uninterruptible Power Supply (UPS) systems as well as providing electricity storage for remote area power systems. The VRB exhibits attractive technical performance characteristics and cost competitiveness compared to conventional lead-acid and nickel-cadmium battery technologies typically used in these applications.

The Battery

The Issuer received a Business Plan and VRB Market Assessment for South Africa prepared by Telepower Australia dated October, 1999. The Telepower business plan was filed with the British Columbia Securities Commission through the SEDAR electronic filing system under project number 266265. The following information has been taken from the Telepower Business Plan.

The VRB falls into the general class of reduction/oxidation flow batteries. This class of battery employs an electrolyte, where energy is stored, and a cell stack, where energy conversion occurs. Pumps are used to circulate the electrolyte from storage tanks through the cell stack and back to the tanks, as illustrated in *Figure 1* below. As with all batteries, energy is produced when electrons, generated during the electrochemical reactions occurring within the battery, flow between two terminals having different electrical potentials. In most batteries, the energy is effectively stored in a solid material, usually metal electrodes, such as lead.

The VRB stores energy in the vanadium pentoxide electrolyte and uses conducting polymer plates with a graphite felt surface to collect the current. This current is generated by the transfer of electrons from the electrolyte in the positive half-cell to the electrolyte in the negative half-cell and is supported by the flow of hydrogen ions across a membrane separating the electrolytes. The electrolyte is a solution of vanadium mixed with sulphuric acid, with about the same acidity as in a conventional lead-acid battery. The electrochemical reaction is reversible, so the VRB can be charged and discharged. The concentration of each ionic form of the vanadium electrolyte changes as the battery is charged and discharged, with electrical energy being converted to chemical energy and vice-versa.

The battery is made up of two reservoirs, to house the two different electrolyte solutions, and a "stack" of cells. Each cell has two half-cells, separated by a special membrane, and two current-collecting electrodes. One of the two different ionic forms of the electrolyte is in each half-cell. The positive and negative half-cells respectively contain the electrolyte as Vanadium (II/III) and Vanadium (IV/V) redox couples. A pump supplies electrolyte to each half-cell, in a closed loop with the half-cell reservoir. When charged electrolyte solution is allowed to flow through the stack, electron transfer between the different forms of vanadium ions across a separating membrane can be forced to flow into an external circuit and so complete the electrochemical path for discharge. Forcing current into the stack from an external source reverses the process and recharges electrolyte in the stack, which is then pumped back into the reservoirs.

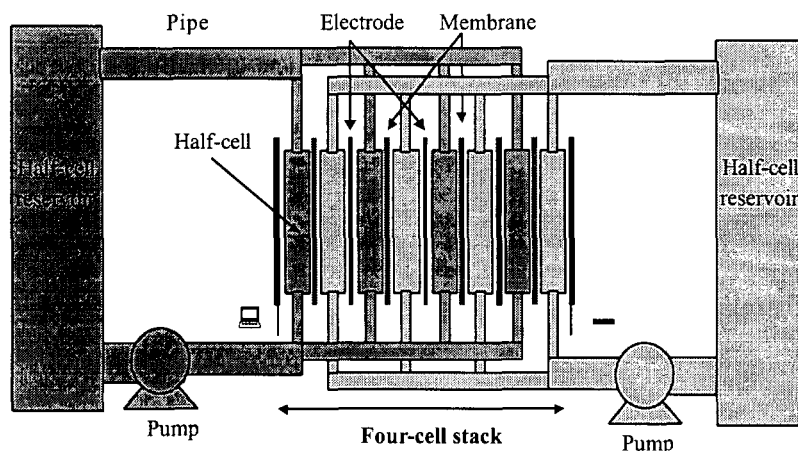


Figure 1: Schematic of the Vanadium Redox Battery.

In the VRB, the electrolyte flows through the cells in a parallel fashion, and the voltage is developed across the cells in a series fashion. The nominal cell voltage is 1.2V ("volts"). The current density is determined

by the surface area of the current collectors within the cell, but the supply of current depends on the electrolyte flow through the cells, and not on the stack itself.

In short, the performance of the VRB depends upon;

- the voltage, which is a function of the number of individual cells in a battery stack;
- the maximum current, which is a function of the surface area of the electrodes in each cell; and
- the energy storage capacity, which is a function of the electrolyte concentration and volume.

VRB Technology Advantages/Disadvantages

VRB is a unique energy storage technology, with technical performance characteristics and cost competitiveness against conventional electrical energy storage technologies which are very attractive for stationary market applications.

Technology Advantages

In telecommunications and many other stationary applications, the lead-acid battery is typically the technology of choice for energy storage. As a battery technology, the VRB has a number of advantages over the conventional lead-acid battery technology:

- high cyclic energy efficiency

All batteries have intrinsic energy losses associated with the storage cycle. The intrinsic losses within the VRB are quite low and generally controllable. In many practical applications, the VRB can be operated with higher cyclic energy efficiency compared to the lead-acid batteries typically used in stationary applications.
- no life degradation from deep discharges

VRB can operate cyclically anywhere within its nominal state-of-charge range without degradation in its energy storage ability. There is no requirement to keep electrolyte charged in order to extend life, and this corresponds to flexible system operation.
- no chemical degradation due to oxidation

The electrolyte can be contained in a manner that minimizes oxidation. Oxidized electrolyte can be recovered using chemical/electrochemical processes.
- indefinite life of electrolyte (no disposal issues)

As a product, the VRB is not a consumable item. Electrolyte can be fully recovered from any decommissioned system for use in other systems.
- indefinite cycle-life (limited by membrane and pump degradation)

With suitable component selection (mainly related to acid resistance), the only known components requiring short-term maintenance are the membrane and pump bearings. Selected membranes have demonstrated greater than 5,000 cycles, which is better than lead-acid technology which at present can be ruined by constant deep discharge. Pump bearing lifetime can be engineered to extend beyond 10 years of full-time operation.
- energy storage is accurately measured using a direct electrical reading (*i.e.* fuel gauge)

The open-circuit voltage of the electrolyte is a direct measure of state-of-charge, but not capacity.

- lower environmental impact during life cycle

The environmental impact of both vanadium redox and lead-acid batteries for use in stationary applications has been reported, using a life-cycle assessment approach. The report indicates that the VRB contributes between 725% of emissions of key environmental impact (CO₂ (carbon dioxide), SO₂ (sulphur dioxide), CO (carbon monoxide), CH₄ (methane), NO_x (nitrous oxides), N₂O (dinitrous oxide) during the life-cycle when compared to the lead-acid battery.

These characteristics provide potential for the VRB to penetrate existing lead-acid battery markets. These characteristics also provide substantial foundation for new potential markets to develop, which:

- have not previously developed due to a lack of available technology solutions, and
- will emerge as a result of new energy storage system concepts for DC and AC power infrastructure.

One of the significant aspects of the VRB technology is that the power of the VRB depends on the total flow surface area of the stack, while the available stored energy depends on the volume of charged electrolyte. For conventional lead-acid or nickel-cadmium battery technology, the electrodes and electrolyte have to be co-housed, and the power and energy performance is tightly coupled to the dimensional interdependence of the plates and electrolyte volumes. This is not the case with the VRB, where the electrodes and electrolyte do not have to be co-resident. This means that ideas about energy storage need not be limited by the packaging constraints that apply with lead-acid battery technology.

Electrically, different levels of energy may be drawn from different cells or groups of cells within the stack merely by maintaining sufficient electrolyte flow into the cells demanding the higher power. The stack does not have to be charged and discharged at the same terminal voltages. For instance, the VRB may be discharging at one voltage tapped off the series stack voltage, yet be charging across another portion of the stack at a different voltage.

Thus the characteristics of the VRB permit considerable latitude in designing systems for specific energy storage applications. Another important feature of the VRB is that the use of solutions for energy storage allows independent sizing of system power (determined by the number of cells in the stack and the size of the electrodes) and energy storage (determined by the concentration and volume of the electrolyte).

The energy storage capacity can thus easily be varied from just a few hours, as in emergency uninterruptible power supply ("UPS") or load-leveling applications, to several days or weeks, as needed for remote area stand-alone applications employing photovoltaic or wind generating systems.

The VRB is not damaged by fluctuating power demand, by repeated total discharge or by charge rates as high as the maximum discharge rates. It can be recharged or discharged from any state of charge with no loss of efficiency or damage to the system. It can also be rated to ensure that gassing is controlled during the high charge rates associated with rapid charging, such as that found during regenerative braking.

Technology disadvantages

The known areas of concern which development work in the short term may alleviate are:

- electrolyte imbalance

Over time, sulphuric acid and ionic vanadium concentrations change due to migration across the membrane between the two half-cells. The rate of change is dependent on the type of membrane. Maintenance, in the form of a mixing process of the two electrolyte solutions, is required when the imbalance starts to significantly effect battery performance. Maintenance can be engineered to be automatic. At present, manual maintenance has been performed every 2-4 weeks under cyclic operation in Japanese demonstrations.

- electrolyte oxidation

Charged electrolyte species will oxidize in air. This can be controlled, for example by storage of electrolyte in a nitrogen atmosphere, or alternatively by using a surface barrier of oil (as used by the University of New South Wales ("UNSW")). Oxidation causes lost capacity, which can't be recovered using normal charge/discharge cycling, but can be recovered using chemical/electrochemical maintenance processes.

- electrolyte precipitation

Depending on temperature and concentration levels, vanadium will precipitate out of solution over time. Research into electrolyte stabilization has presently achieved stable operation over a temperature range of about 15°C to 45°C.

- shunt currents

Shunt-current refers to the combined multi-path currents that are generated as a result of the electrolyte flow channels in the VRB (and other flow-based battery systems). The shunt-current path is via a loop containing the manifolds (which connect the half-cells) and the intervening cell electrodes/membranes. Additional shunt-current will be generated in multi-stack systems as a result of the interconnecting stack pipes. Shunt-current occurs continuously, whether the battery is under charge, discharge or open-circuit, and this leads to battery self-discharge, and reduces cyclic energy efficiency.

Shunt-current can be alleviated by a number of methods, which may allow a system to be designed to have negligible affect from shunt-current for the intended application.

Development of the VRB technology to date:

- Under research and development at the UNSW in Australia since the early 1980's. UNSW has built and tested fully operational prototypes.
- Mitsubishi Group, Japan obtained a development license in 1993 from UNSW for on grid applications; non-grid industrial and commercial applications and non-grid interactive stationery dwellings with photo voltaics. Mitsubishi have demonstrated a number of small prototypes in addition to testing a demonstration scale 200 kilowatts ("kw") / 800 kilowatts per hour ("kWh") VRB Unit that has been connected to the Tokyo grid since 1997.
- Sumitomo Electric Industries Ltd. ("SEI"), Japan, obtained a license in August 1999 for stationary applications in Japan. SEI have built and operated a 450kw / 2 hour grid connected load-leveling VRB system at a sub-station on the Tokyo grid. SEI have also operated demonstration systems for kerb-side and in-building grid connected applications using 20kw - 8 hour, 50 kw - 4 hour and 100 kw - 8 hour systems. In addition, Sumitomo installed for Tohori Sanyo Electric, Japan, a 3000 kw - 1500 kw

/ 1 hour system in February, 2001 and a 500 kw / 10 hour system in June, 2001, for Kwansei Gakuin University, Japan.

On March 3, 2000, a strategic alliance was signed with Highveld Steel and Vanadium Corporation of South Africa ("Highveld"). Highveld is a substantial steel and ferro-alloy producer and a significant producer of vanadium. Under the agreement Highveld and the Issuer have formed a 50:50 strategic alliance within Africa for the purpose of, among other things to:

- review the feasibility of establishing a vanadium electrolyte manufacturing plant in South Africa for primarily the supply of vanadium electrolyte for VRBs installed within Africa;
- conduct further research development work on increasing electrolyte concentrations (higher molarity); and
- develop the commercialisation of the VRB Technology within Africa.

On August 11, 2000, the Issuer entered into a tripartite Heads of Agreement with TSI (the Technical Services Division of ESKOM Enterprises (Pty) Ltd. of South Africa ("Eskom")) and Highveld. Eskom is the fifth largest power utility in the world and the dominant South African power utility supplying approximately 95% of the country's electricity requirements (which amounts to more than half of the electricity generated on the African continent). Eskom has 26,461 kilometres of transmission lines, which span the entire country and also carry power to neighbouring countries. As a member of the Southern African Power Pool (SAPP), which consists of 12 national utilities, Eskom also supports the development of a southern African transmission grid to encourage co-operation and accelerate economic growth in the region.

The Issuer, TSI, Highveld alliance was formed for the purpose of among other things:

- having TSI identify and host certain demonstration trial sites for the Issuer's VRB/VESS;
- establishing through demonstration trials the further development of the technology as an energy storage system for the South Africa and African market for which TSI operates; and
- providing a framework for the parties to bring together their particular strengths and credibility as well as their technical and operational resources with respect to the commercialisation of the technology.

The tripartite alliance announced that an initial 6 month trial demonstration of the VRB/VESS Technology was agreed with TSI/Eskom. TSI/Eskom will trial a 250 kW – 520 kW hour constant power VRB primarily for purposes of UPS connected to a 400 VAC line in Cape Town, South Africa along with a range of other power utility application tests. Installation and commissioning of this system has been successfully completed. As of January, 2002, the unit is operating as predicted. Additional tests to demonstrate the full capabilities of the VRB system and its controls will take place in February. The TSI/Eskom trial demonstration unit is the largest VRB to be demonstrated to date outside of Japan and the first trial of the proprietary electronic software where the design and operating characteristics of the VRB are optimized and integrated with automated intelligent control and operational management electronics (referred to as a "VESS").

The TSI-Eskom trial demonstration represents an important step in implementing the Issuer's business plan of commercialising the VRB/VESS technology in Africa. The TSI-Eskom demonstration will also allow for:

- progressive VRB technology performance improvement;
- end-user support to be progressively gauged;
- feedback and required correction decisions (if any);
- business planning and focus;
- monitoring of business line drivers;
- adjustment and optimisation of time frames;
- status among government and energy-related bodies which can be used to leverage future trials (if required) and commercial opportunities;
- experience in costing and managing local technology trials;
- exposure to potential local and international business partners, for future product manufacture and marketing opportunities;
- obtaining technical performance information and to define prioritised areas of engineering effort; and
- obtaining technology costing information to refine the marketing and business line plans.

The initial demonstration trial(s) also permit early production units to be "road tested" in a controlled manner.

The following is a summary of the Issuer's achievements in South Africa to date:

- prepared a comprehensive business plan and VRB technology market assessment for South Africa. This business plan is being executed;
- completed a 50:50 strategic alliance with Highveld. Having a secure low cost long-term supply of vanadium is a critical component for commercialising the VRB technology. The Highveld alliance removes the vanadium commodity supply risk giving commercial certainty to the Issuer and the Issuer's customers;
- completed, with Highveld, a vanadium electrolyte pilot plant in South Africa, which is producing low impurity high quality vanadium electrolyte. The Issuer/Highveld will implement and scale up bulk vanadium electrolyte manufacture starting in February, 2002;
- completed production of vanadium electrolyte for the TSI-Eskom VRB unit situated in Cape Town, South Africa;
- completed a tripartite (three way) alliance agreement with TSI-Eskom and Highveld. Eskom is the fifth largest power utility in the world and the dominant South African power utility supplying approximately 95% of the country's electricity requirements;

- completed the design, engineering, construction, component integration and commissioning of the first large-scale commercial trial of user-based application for the VRB outside of Japan. It is a 250 kW – 520 kWh VRB – VESS built to demonstrate applications ranging from sub-second UPS ride-through capabilities through to power quality and emergency power back-up;
- developed the VESS through Telepower Australia. VESS allows the VRB to operate as an energy and power transfer module and facilitates the flexible utilisation of standardised stack and vanadium electrolyte storage tank modules to suit a wide range of applications;
- demonstrated the Advanced Power Conditionally Systems (“PCS”) developed by TSI.

Vanadium Energy Storage Systems (VESS)

The characteristics of the VRB provide the potential to penetrate existing lead-acid battery markets, and also provide substantial foundation for new potential markets. However, the potential of VRB technology is significantly enhanced in the Vanadium Energy Storage System (VESS) concept.

VESS integrates the VRB into a practical energy storage system, wherein the design and operating characteristics of the VRB are optimized and integrated with automated intelligent control and operational management electronics. The VESS arrangement leverages the storage attributes of VRB technology, and provides:

- practical energy storage for new applications previously thought to be not cost-effective nor achievable with lead-acid technology;
- storage in terms of energy and power transfer (rather than the traditional approach to standby energy storage in terms of charge and discharge line voltages);
- instantaneously increased autonomy time by the introduction of additional charged electrolyte;
- multiple output power capabilities to service different line voltage requirements at the one installation;
- systems that can be charged and discharged simultaneously;
- operation with one or more electrical inputs, and outputs, at multiple voltage levels;
- beneficial operational & replacement options for existing DC power infrastructure such as:
 - every cell is in the same state of charge,
 - self-controlled to provide automated self-regulation and self-protection,
 - extremely low level of maintenance,
 - longer life, with partial replacement of some components after 5-10 years,
 - energy storage can be incrementally added at any time, with a cost of about 20% of additional lead acid battery capacity.
- an ability to integrate and optimize the performance of the PCS and VRB;

Future Developments

Sales to end users have commenced by one of the Japanese licensees of Pinnacle, namely Sumitomo Electric Industries Ltd. (“SEI”). For its part, the Issuer intends to work with Highveld to further develop

an increased power output of the VRB while at the same time, decreasing the size of the VRB. The Issuer will also continue to investigate other applications, such as remote area power and telecommunications. The Issuer is not aware of any regulatory burdens or approvals required to advance its business.

In August, 2000, TSI / Eskom agreed to trial for the purposes of Uninterruptible Power Supply ("UPS") an initial 250 kw – 520 kw hour constant power VRB connected to a 400 VAC line in Cape Town, South Africa along with a range of other power utility application tests. The TSI / Eskom VRB-UPS power system application trial demonstration test is to protect sensitive load equipment against short duration dips and line interruptions and to improve line power quality.

The successful completion of the installation and commissioning of the 250 kW – 520 kWh VRB-VESS system occurred in the late fall of 2001. The TSI/Eskom VRB-VESS system is the first and largest industrial scale system outside of Japan. The Issuer is pleased to report a trouble free and time-efficient engineering effort.

The engineering, assembly, installation and commissioning of the TSI-Eskom system was carried out by the Issuer in association with its primary technical consultants, Telepower Australia. In keeping with the Issuer's business strategy of reducing the VRB and VESS to core components and developing low-cost supply paths for each element in order to meet baseline cost targets through aggregation, system components for the TSI-Eskom VRB-VESS system were obtained from various sources reflecting an international effort to commercialize the technology. The cell stacks were purchased from SEI. Six 42 kW, 100-cell stacks were used. The Issuer/Highveld produced the electrolyte in South Africa at an electrolyte pilot plant established in Highveld's Witbank facilities to a purity level specified by the stack manufacturer. The Issuer/Highveld will implement and scale up bulk vanadium electrolyte manufacture going forward. Eskom's 250 KVA shunt connected Dynamic Power Quality Compensator (DPQC-P-250) was used as the PCS bi-directional inverter. Proprietary VESS hardware and software was provided by The Issuer/Telepower. VESS is a proprietary advancement of the basic VRB developed by the Issuer/Telepower. VESS integrates the VRB into a flexible energy storage system through exploiting the attributes of the VRB and PCS by optimized automated intelligent control and operational management electronics. VESS allows practical energy storage for new applications not before thought cost effective or achievable with lead-acid technology as well as pending beneficial replacement options for existing DC power infrastructure. A local South African engineering firm carried out the civil works.

After the current phase of verification and calibration of the interface between the Issuer's VESS and Eskom's PCS equipment and subsequent benchmarking of system performance, a program designed to demonstrate a number of power quality applications is to commence. The TSI-Eskom system is designed to show the versatile configuration and operation of VESS, with the single installation demonstrating applications ranging from sub-second UPS ride-through capability through to power quality and emergency power back-up.

The general specification of the TSI-Eskom VRB-VESS system is summarized as follows;

Parameter	Specification
AC output line	380V 3 phase
Rated power	250kVA
Operational run-time	2 hour

DC line voltage	Nominal 700V
DC voltage range	650V – 850V
Max DC current	400A

As part of the Issuer's commercialization strategy for the VRB technology in South Africa and the African market where the Issuer holds all right, title and interest to the VRB technology, the Issuer has a tripartite Heads of Agreement with TSI – Eskom and Highveld.

The formal launch and first public operational demonstration of the company's 250 kW – 520 kWh VRB-VESS, installed for TSI-Eskom of South Africa at the University of Stellenbosch, Cape Town, South Africa was held on Friday October 26, 2001 at the University of Stellenbosch. Representatives from the Issuer, TSI-Eskom, Highveld (with whom the Issuer has an alliance agreement) and Telepower Australia, (the Issuer's primary technical consultants) were present at the formal launch. The next round of testing, including an improved version of TSI's PCS will begin in February, 2002.

Ongoing Commercialisation Strategy

Vantech's business model and value strategy is to build a VRB industry and exploit the fledgling electrochemical energy storage domain starting with the utility sector. The approach is to build upon Vantech's existing strategic alliances and add other partners capable of increasing the value stream. This general integration and strategic alliance model will be used as the cornerstone of the VRB-VESS commercialisation plan for North America. Vantech is in the process of implementing a carefully considered plan of strategic North American trials and commercial demonstrations. These trials are based on a risk assessment approach aimed to secure technical and engineering acceptance, then adoption and commercialisation of the VRB-VESS Technology. As the Issuer now controls Pinnacle, the Issuer has the ability to implement the VRB/VESS technology in all parts of the world, not just in Africa.

In this regard, the Company announced on January 30, 2002 it has entered into an agreement to supply PacifiCorp with a 250 kW – 2000 kWh (8 hour) Vanadium Energy Storage System ("VESS"). PacifiCorp, a subsidiary of United Kingdom utility Scottish Power (NYSE: SPI), provides electric service to approximately 1.5 million customers in Utah, Wyoming, Oregon, Washington, Idaho and California. With a service area of more than 135,000 square miles, PacifiCorp has one of the most extensive transmission systems in the U.S. PacifiCorp, with approximately \$4 billion in sales, is one of the lowest-cost electricity providers in the U.S. and generates about 8,000 megawatts from coal, hydro, gas-fired combustion turbines, geothermal and renewable wind power. The VESS unit, which will be modular and relocatable in design, will be used by PacifiCorp to supply peak power capacity (charging in the off-peak hours) and provide end of line voltage support (supplying up to 250 kVAR of reactive power) in a remote area in southeastern Utah. Installation and commissioning of the VESS unit is scheduled to be completed by June 30, 2002. The stored energy and voltage support available through this VESS unit lets PacifiCorp maintain reliable electric service in the area while deferring the need to build a new substation. Because the unit is portable, it can be moved to another location as needed in the future. The PacifiCorp 250 kW – 2000 kWh VESS unit is the first large-scale commercial user-based application of VESS technology in North America.

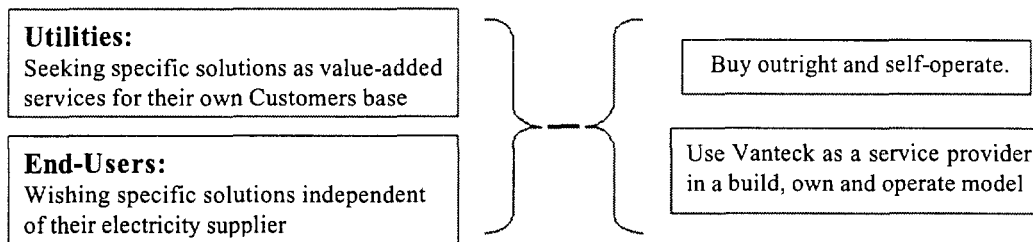
Market aspects

Vanteck's objective is to initially commercialise the VRB and VESS in the Utility sector in the "small to medium" size range of 50 kW/200 kWh to 1MW/8MWh. The target market is in the so-called distributed resources domain, and covers such categories as AC & DC UPS and power quality applications in both end-user premises and in local area distribution domains of utilities. Medium to large-scale electrochemical electricity storage is an emerging industry, and given a new application-base now made possible with cost-effective storage such as VRB, the market characteristics and opportunities are still developing.

Vanteck's assessment of the US market potential has identified baseline cost targets for a mature VRB/VESS product. The strategy to meet these cost targets is based on reducing the VRB/VESS to core components, and developing low-cost supply paths for each element. Vanteck's product model is a simple modular approach, where mass production of standard components will drive the primary cost reductions combined with strategic component alliances with key original equipment manufacturers ("OEM").

A core aspect of the Vanteck roll-out plan is to progressively establish domestic VRB and VESS OEM relationships which have the capabilities to provide the key component elements of the technology. This includes supply of standardised balance of systems componentry, cultivation of power conditioning equipment suppliers and licensing of proprietary hardware and software to local enterprises.

VRB/VESS will be offered as a product-based solution, and the business model addresses a mix of two classes of customer and two modes of commerce:



Vanteck's US roll-out has three phases, each of which are overlaid by a parallel process of building local supply capabilities. Phase I, which involves 3-5 strategic trials and commercial demonstrations in the US, is expected to occur over a 6-12 month period, beginning 4th quarter, 2001. Phase II, which sees increased uptake of the VESS technology on a commercial basis, is expected to begin 3rd quarter 2002, and proceed for another 12-18 month period. Approaching the end of Phase II, the scale and rate of uptake of the technology will be apparent, and this will drive the scale of production beyond the pilot stage.

In summary Vanteck's North American entry plan is as follows;

Phase I (6 – 12 months)

- staged controlled strategic technical trials and commercial demonstrations
- 3 - 5 systems
- sizing 50 kW/200 kWh to 1MW/8MWh
- target applications; customer premises uninterruptible power supply ("UPS") and specific power quality ("PQ"), including load levelling

Phase II (12 – 18 months)

- increased uptake with Utility and End Users 10 – 20 systems units
 - sizing 200 kW/800 kWh to 2 MWh
- target applications
 - specific PQ solutions, emergency plan AC & DC UPS
 - storage in renewable power installations, diesel abatement

Phase III (18 – 24 months, onward)

- establishment of specific product lines
 - modular “off-the-shelf” VESS < 100 kW
 - generic solutions VESS < 2.5 MW
 - specific projects VESS/VRB > 2.5 MW
- consolidate specific sector applications
 - power quality, load levelling, arbitrage, solar, wind
 - parallel activity
- increased local content as cost driver sizing
 - local electrolyte production
 - local stack OEM relationship
 - development of modular power conditioning equipment compatible with VESS
 - local OEM relationship for VESS software & hardware.

In addition, in the spring of 2002, the Issuer intends to commission a comprehensive Business Plan with a view to finalizing the appropriate business model to develop the VRB-VESS in North America.

Proprietary Protection

With respect to Africa, a patent featuring aspects of “Stabilized Electrolyte”; “Stabilized Electrolyte Solutions”; and “Stabilized Electrolyte Solutions, Method of Preparation” has been granted for South Africa under South Africa Patent number 94/9140. The patents were granted to the UNSW and by virtue of its agreement with the UNSW, Pinnacle acquired the rights afforded by the patent. Under its agreement with Pinnacle, Federation obtained the benefit of the patent, which benefit was subsequently acquired by the Issuer’s subsidiary as a result of the acquisition of the VRB rights under the Acquisition Agreement. A summary of all patents is attached as Schedule “A” hereto.

Competition

(i) Mitsubishi Rights

The Issuer's exclusive right to exploit and utilize the VRB within the continent of Africa is subject to a pre-existing license for Africa and elsewhere (the "Mitsubishi License") granted to Mitsubishi Petrochemical Company Limited and Kashima Electric Power Corporation of Japan (collectively, the "Licensees") by Unisearch dated August 11, 1993. The Mitsubishi License is restricted to the following applications:

- (a) on grid load levelling;
- (b) non-grid interactive stationary dwellings with photo voltaics;
- (c) non-grid industrial and commercial site applications.

The Mitsubishi License was exclusive to the world except for certain South East Asian / Asia Pacific countries. (Countries excluded: Thailand, Malaysia, Singapore, Indonesia, Burma, Taiwan, Hong Kong, Vietnam, Laos, South Korea, the Philippines, Cambodia, New Zealand, China and Australia).

In order to maintain these "exclusive" rights, the Mitsubishi License required the Licensees to meet a number of conditions, including the payment of a minimum royalty of U.S.\$50,000 by no later than March 31st every year and in the event that this royalty payment was not received by Pinnacle before March 31st in any year, the rights granted by the Mitsubishi License automatically became non-exclusive.

By March 31, 1999, the Licensees failed to make the required royalty payment. As a result, Pinnacle advised the Licensees that the Mitsubishi License was non-exclusive.

The Licensees have met with Pinnacle on a number of occasions in an attempt to restore the exclusivity provisions and have threatened legal action in the event that Pinnacle does not agree to restore an exclusive license. Pinnacle is confident and have a legal opinion that Pinnacle has observed all the requirements and obligations imposed upon it under the Mitsubishi License and that any claims by the Licensees would be unfounded and unsuccessful. In order for the Licensees to receive their exclusivity back, Pinnacle will require commercial consideration. In discussions to date, the Licensees have expressed an interest in restoring exclusivity in Japan only.

There can be no certainty that the Licensees will not request that exclusivity of their restricted rights to exploit the VRB technology be restored for Africa and other jurisdictions which, if arranged for Africa, may adversely affect the planned business of the Issuer.

(ii) Sumitomo Electric Industries Ltd. ("SEI")

SEI obtained a license for stationary applications in Japan, with an ability to be granted rights by Pinnacle for installations in areas outside of Japan. These rights are considered on a project-by-project basis and require additional payments to Pinnacle.

It is therefore possible that SEI could compete directly with the Issuer in key market areas, such as the United States of America. However, the potential market for VRB applications is so large that should SEI enter into such a direct competition, it would encourage acceptance by the utility customers of the new technology.

The Issuer has had several discussions with SEI, with the objective of cooperating to develop the VRB market. For instance, the Issuer utilized cell stacks manufactured by SEI for the Stellenbosch installation.

(iii) Emerging Alternative Technologies

The VRB can be considered in any application where low cost energy storage is needed. The VRB can compete directly with the lead-acid battery in storage applications requiring more than about 5kW power or 5kWh of stored energy. These types of application include load leveling, village power, emergency standby power plant, and remote area power systems. The VRB is not considered a competitor to the lead-acid battery in engine starting applications (SLI), or to be suited to electric vehicle applications in its present state of development.

Several emerging alternative energy storage technologies are potentially applicable to industrial stationary applications and hence will be competition for the VRB:

- Zinc-bromine battery
- Flywheel
- Super-conducting energy storage systems (SMES)
- Sodium-Nickel Chloride (Zebra)
- Zinc-Air
- Nickel-Metal Hydride
- Lithium-ion
- Lithium-Polymer Battery
- Regenesys Sodium Bromide / Sulphide Flow Battery

The automotive industry push to develop battery technology suited to electric vehicle applications has seen significant research funding of lead-acid and emerging battery technologies over the last 5 years. The present level of research effort is expected to continue, and the spin-off from this research activity may be an increasing commercial range of competitive energy storage technology, as well as continued improvement of existing lead-acid technology, over the next 10 years.

ITEM 5 - SELECTED CONSOLIDATED FINANCIAL INFORMATION

The following table sets forth selected financial information for the Issuer for and as of the end of the periods indicated. This financial information is derived from the audited financial statements of the Issuer as of June 30, 2001, June 30, 2000 and October 31, 1999. Results for the three periods are not necessarily indicative of results for future periods:

	Year Ended June 30, 2001	Eight Months Ended June 30, 2000	Year Ended October 31, 1999
Total Revenues ⁽¹⁾	64,770	2,895	44
Net Income (Loss)			
Total	(1,686,297)	(289,456)	(24,088)
Per Share ⁽²⁾	(0.062)	(0.017)	(0.005)
Total Assets ⁽³⁾	6,155,820	1,228,389	3,389
Long Term Financial Liabilities	Nil	Nil	Nil
Dividends Declared	Nil	Nil	Nil

(1) Derived solely from interest income.

(2) Calculated based on the number of shares outstanding as of the end of the fiscal year, inclusive of unexercised Special Warrants and exclusive of unexercised Share Purchase Warrants and incentive stock options;

(3) Data is given as of the end of the period indicated.

Dividend Policy

It is not anticipated that the Issuer will pay any dividends on the common shares in the foreseeable future. The actual timing, payment and amount of dividends, if any, will be determined by the Board of Directors of the Issuer from time to time based upon, among other things, the cash flow, results of operations and financial condition of the Issuer, the need for funds to finance ongoing operations and such other business considerations as the Board of Directors of the Issuer considers relevant.

ITEM 6 - MANAGEMENT DISCUSSION AND ANALYSIS

The Issuer has no record of positive cash flows from operations and is in the early stage of advancing the VRB-VESS. The Issuer does not anticipate generating positive cash flows from operations during the twelve month period following the date of this Annual Information Form. However, commercial sales of the VRB/VESS systems will take place during this period. The Issuer's historical capital needs have been met by advances and equity subscriptions from both private investors (including members of management) and the public.

During the fiscal year ended October 31, 1999, no funds were raised. General and administrative expenses were \$50,455, with the most significant expenses incurred being consulting fees of \$16,500 and professional fees of \$11,374. During the year, \$327,871.95 of debt owed to various creditors was settled

through the issuance from treasury of 2,185,813 common shares. At October 31, 1999, the Issuer had a working capital deficit of \$91,139.

During the eight months ended June 30, 2000, the Issuer realized proceeds of \$550,000 through the sale of Special Warrants. General and administrative expenses were \$292,351 with the most significant expenses incurred being consulting fees of \$55,757, professional fees of \$100,494 and travel and accommodation expenses of \$82,902. At June 30, 2000, the Issuer had a working capital deficiency of \$46,230.

During the fiscal year ended June 30, 2001, the Issuer realized proceeds aggregating \$4,803,315 through equity financings (\$2,726,815), exercise of incentive stock options (\$88,500) and exercise of Special Warrants and share purchase warrants (\$1,988,000). General and administrative expenses were \$1,072,651 with the most significant expenses being consulting fees of \$402,473, professional fees of \$229,105, travel and accommodation expenses of \$275,194, investor relations expenses of \$59,941 and office and general expenses of \$51,568. At June 30, 2001, the Issuer had a working capital of \$1,504,621.

Subsequent to the fiscal year ended June 30, 2001 to the date of this Annual Information Form, the Issuer issued the following shares from treasury for the following purposes:

Description	Number of Shares	Amount
In exchange for 4,774,545 shares of Pinnacle	1,193,629	\$2,064,978.17
In exchange for 2,130,000 shares of Pinnacle	532,500	559,125.00
In exchange for 2,236,334 shares of Pinnacle	559,080	637,351.20
Shares cancelled & returned to treasury	(437,417)	(498,655.00)
In exchange for 10,771,761 shares of Pinnacle	2,692,934	4,631,846.00
In exchange for 2,418,735 shares of Pinnacle	604,680	798,177.60
In exchange for 466,380 shares of Pinnacle	116,594	151,572.20
In exchange for 6,343,316 shares of Pinnacle	1,585,827	2,616,614.55
In exchange for 10,007,116 shares of Pinnacle	2,501,774	3,302,341.68
In exchange for 521 shares of Pinnacle	130	183.30
Shares cancelled and returned to treasury	(752,943)	(1,295,061.96)
Exercise of Series "A" Warrants	1,233,333	431,666.55
Exercise of Series "B" Warrants	954,800	954,800.00
Exercise of Series "F" Warrants	5,000	5,000.00
Exercise of Series "G" Warrants	130,000	130,000.00
Exercise of Series "H" Warrants	50,000	50,000.00
Exercise of Agent's Warrants	14,200	14,200.00
Exercise of Incentive Stock Options	15,000	13,500.00
TOTAL:	10,999,121	\$14,567,639.29

It is the Issuer's intention to invest surplus funds in short-term money-market instruments and government securities, as well as investment-quality, interest-bearing or dividend-paying securities.

The Issuer's financial success will be dependent on the extent to which it can commercialize the VRB and related opportunities. Such development may take years to complete and future cash flows, if any, are difficult to determine with any certainty (See: "Investment Risks").

Stated Business Objectives

The Issuer has established the following short term and medium term objectives, commencing in July, 2001. The estimated time for completion of these objectives are:

- Develop detailed business line plans based on technology access and South African industry arrangements - ONGOING;
- Continue to advance the purposes of the joint venture alliance in place with Highveld Steel and Vanadium Corp. Ltd. – ONGOING;
- Finalize strategic alliance agreement for demonstration testing - ONGOING;
- Site test product unit at demonstration test site – ONGOING
- Deliver at least one commercial VRB/VES unit in the USA by June 30, 2002 and to receive orders for at least 3 units during the 12 month period following the date of this Annual Information Form.

Milestones

The significant events that must occur for the business objectives of the Issuer to be accomplished are:

- Establish a subsidiary operating company in the USA;
- Complete all tests on the Eskom installation in South Africa;
- Recruit a Vice President of sales and marketing;
- Finalize negotiations with SEI for supply of cell stacks
- Install and commission the large scale electrolyte plant with Highveld.

The Issuer believes that it will have sufficient working capital to meet its above stated business objectives.

INVESTMENT RISKS

The business activities of the Issuer and its subsidiaries, Vanteck International Limited and Pinnacle VRB Limited (hereinafter collectively called the "Issuer") are subject to certain risks and there are a range of factors which may impact on its future performance and profitability.

Some of these risks can be mitigated by the use of safeguards and appropriate systems and actions, but some are outside the control of the Issuer and its management.

The general risks described below apply not only specifically in respect of the future performance of the Issuer and investment in the Issuer, but in respect of future performance of businesses and investments generally.

Economic climate and governmental policy

General economic factors such as economic activity, inflation, currency exchange fluctuations, industrial disruption, interest rate fluctuations, component and commodity prices, stock market prices and changes in government policy, regulations or legislation may have an adverse impact on the Issuer and its future operating performance.

Share investment - market volatility

In general, shares should not be considered to be a short-term investment. There are risks associated with investments in shares, where investment values may fall as well as rise. The value of shares in the Issuer can be expected to fluctuate depending upon factors including general world-wide economic conditions, changes in government policies, investor perceptions, movements in interest rates and share prices, prices of the merged businesses' products and services, variations in the operating costs and the costs of capital improvements which the Issuer may require.

Insurance

At the present stage of its development, the Issuer depends to a large extent on the services of its senior management. The Issuer has not obtained "key man" insurance on the life of any of its senior management. In the event that the services of certain members of the Issuer's senior management become unavailable to the Issuer for any reason, such unavailability could have a material adverse effect on the Issuer's business. In addition, the Issuer's future success will depend, in large part, on its ability to attract and retain qualified managerial and technical personnel. Because of competition for such personnel, there can be no assurance that the Issuer will be successful in this regard.

Africa

The Issuer is the holder of the right to exploit and utilize the VRB within the continent of Africa (47 countries). The value of the Issuer's rights and investment may be adversely affected by significant political, economic and social uncertainties in Africa, some of which are as follows:

- The continent of Africa is made up of numerous distinct countries, many of which do not have a comprehensive system of laws. In addition, the enforcement of existing laws may be uncertain and sporadic, and the implementation and interpretation may be inconsistent. Many countries are relatively inexperienced in enforcing the laws that exist, which may lead to greater uncertainty as to the outcome of any litigation. Even where adequate laws exist, it may be difficult or impossible to obtain swift and equitable enforcement of such laws or to obtain enforcement of the judgment by a court of another jurisdiction. In addition, the interpretation of laws may be subject to policy changes reflecting domestic political changes, which occur more frequently than in North America, Europe and other more developed areas of the world.

- A change in government policies could adversely affect the Issuer's investment in any country in which it is doing business by, among other factors, changes in laws or regulations or in the interpretation thereof, confiscatory taxation, restrictions on currency conversions, imports and sources of supplies, or the expropriation of private enterprises. Although many governments have been pursuing economic reform policies, no assurance can be given that governments will continue to pursue such policies or that such policies may not be significantly altered, particularly in the event of a change in leadership, social or political disruption or unforeseen circumstances affecting political, economic and social life.
- Although the U.S. dollar is widely accepted in most areas of Africa, each of the 47 countries in which the Issuer may do business has its own currency which is not generally in use outside of the borders of the country. Accordingly, if the Issuer is required to use a currency other than U.S. dollars, the currency rate of exchange may be subject to significant variations due to political intervention or unrest, inflation or other matters, which cannot be foreseen or controlled.

The risks described below are more specific to the future performance of the Issuer and investment in the Issuer.

Credit Risks

The Issuer will face standard credit risk in the event of non-performance by counterparties to trading activities in the normal course of business.

Intellectual property

Intellectual property is a significant part of the Issuer's business. This intellectual property may include brand licences, technology, know-how, trade marks, design and patents (both owned and licensed). No assurance can be given that the validity, ownership or licensed use of intellectual property relevant to the businesses of the Issuer may not be challenged.

In addition Pinnacle's core patents filed in various countries expire in 2006. As the maximum term in, for example, Australia, United States and Japan is 20 years from the filing date no further extension of the patent protection term is available. Pinnacle's patents may also be considered "broad" and are not limited to any particular application. In addition the validity of a patent in any country, may be challenged by third parties at any time during the term of the patent.

Occupational health and safety

In common with all businesses, the Issuer's business will face risks of work place injuries, which may result in workers' compensation claims, related common law claims and potential health and safety prosecutions.

Additional Funds

The Issuer will require additional funds to market the VRB Technology and to effect the expansion of its administration and management staff that will be necessary if it is successful in commercialising the VRB, the amount of which funds are unknown at present. In addition, in the future, the Issuer may

consider it necessary or desirable to conduct further product development on the VRB. The Issuer intends to seek such additional funding through private or public financing, including equity financings, through collaborative arrangements with others and through available cash flow, if any. Adequate funds for these purposes may not be available when required or on terms acceptable to the Issuer. If adequate funds are not available, the Issuer may have to delay, trim or eliminate its product development programs, marketing efforts and other expenditures, adversely affecting its business, results of operations and prospects and leaving in operation only those areas, if any, which management determines may have, at that time, the ability to generate necessary cash flow.

Subcontractors

The Issuer will be dependent on subcontractors to fulfill delivery commitments on a timely basis and the Issuer's success in effectively penetrating the potential markets for its products will be dependent to a large extent on the ability and commitment of, among others, its joint venture partners and other distributors. In addition, operating results may be affected by, among other things, the receipt and/or assembly of defective products or an increase in component costs.

Competition

The technology for implementing alternative fuel cell and energy storage systems is evolving rapidly. The VRB Technology utilised by the Issuer may be subject to obsolescence if competitors develop a better or more cost effective technology. Competitors may include corporations, which have greater financial, technical and operating resources than the Issuer.

Threats of imports

A number of licences for the technology owned by Pinnacle have been granted, some of which belong to substantial companies who may attempt to enter the market in direct competition with the Issuer.

Product risk

Although the licensees of Pinnacle have completed several working prototypes for specific applications, the commercial application to all intended market segments has yet to be confirmed. Failure to demonstrate commercial application in the proposed market segments could impact the Issuer's ability to continue. In addition, notwithstanding commercial demonstration of the VRB, sales at acceptable levels may not be secured. Consequently, the VRB must be considered to be commercially unproven and the Issuer may face significant unanticipated cost overruns in the implementation of any necessary refinements to this technology in order to render the VRB commercially viable.

Environment

The Issuer will be subject to the environmental laws and regulations in each of the jurisdictions in which it operates. The Issuer is not aware of any undisclosed material breaches of environmental law or regulation in its existing business.

Dividends

The Issuer does not presently pay dividends.

ITEM 7 - MARKET FOR SECURITIES

The common shares of the Issuer are posted and called for trading on the Canadian Venture Exchange under the trading symbol "VRB" and on the Frankfurt Stock Exchange under the trading symbol "VNK". The outstanding share purchase warrants of the Issuer do not trade.

ITEM 8 - DIRECTORS AND OFFICERS

The Directors and Officers of the Issuer are as follows:

Name, Municipality of Residence and Office Held	Principal Occupation	Common Shares Beneficially owned as at June 30, 2001 ⁽¹⁾
Rodney N. Duncan West Vancouver, B.C. President, Chief Executive Officer and Director	President Duneagle Capital Corp. 1989 to date; President International Bancor Holdings Ltd. 1980 to date.	38,133
*Michael E. Iannacone, CA Burnaby, B.C., Chief Financial Officer and Director	Vice-President Finance of Flow Control Components Ltd of North Vancouver, B.C., 1991 to 2001; Chief Financial Officer, New Stafford Industries Ltd., April, 1992 to date; Director, New Stafford Industries Ltd., April, 1994 to date	106,666
*Steven C. Kerr Vancouver, B.C. Secretary, Director	Secretary and director April, 1994 to date; Principal of KMJ Group of Companies 1992 to 1996; Principal of Comanche Minerals Corp., 1996 to date.	116,809
*Peter A. Stedwell Waverly, Australia Director	Director since January, 2000; Director of Federation Resources N.L. of Melbourne Australia, June, 1997 to October, 1999; Director of Sammeta Resources N.L. of E. Hawthorn Australia, October, 1994 to July, 1997; Self-employed public accountant, October, 1989 to October, 1994	Nil
R. John Fraser Sunbury, Australia Director	Director since January, 2000; Director of Federation Resources N.L. of Melbourne Australia, March, 1995 to present; Director of Fraser Mining, Melbourne, Australia, August, 1982 to March, 1995	Nil

Name, Municipality of Residence and Office Held	Principal Occupation	Common Shares Beneficially owned as at June 30, 2001 ⁽¹⁾
Donald Nicholson, P. Eng. Vancouver, B.C. Executive Vice President	Holds a B.A.Sc. Electrical Engineering from the University of British Columbia and a D.I.C. Automated Control Systems Imperial College, London. Has held engineering positions with Brown & Root Ltd., SNC Group and Atomic Energy of Canada. Formerly President and CEO of Comstock International, President and CEO of Associated Kellogg Ltd, Chief Executive Officer of Wright Engineers Limited and President and CEO of Yarrows Limited.	117,500

(1) Common Shares held directly and indirectly;

*Denotes member of the Audit Committee

Each director holds office until the next annual general meeting of the Issuer and his election thereafter is subject to the approval of the shareholders of the Issuer at that meeting. The officers are appointed at the discretion of the Board of Directors and typically are reconfirmed or amended as necessary at the first directors' meeting following the annual general meeting of shareholders.

The Issuer does not have an executive committee of directors.

As at June 30, 2001 the number and percentage of the issued shares of the Issuer beneficially owned, directly or indirectly, by directors and senior officers of the Issuer as a group is as follows:

Designation of Class	Number of Shares	Percentage of Class
Common	379,108	1.4%
Options	1,480,000	74%
Warrants	48,500	0.02%

ITEM 9 - ADDITIONAL INFORMATION

The Issuer will provide to any person, upon written request made to the secretary of the Issuer:

- (a) when the securities of the Issuer are in the course of a distribution pursuant to a short form prospectus or a preliminary short form prospectus has been filed in respect of a distribution of its securities.
 - (i) one copy of the AIF of the Issuer, together with one copy of any document, or the pertinent pages of any document, incorporated by reference in the AIF;
 - (ii) one copy of the comparative financial statements of the Issuer for its most recently completed financial year together with the accompanying report of the auditor and one

copy of any interim financial statements of the Issuer subsequent to the financial statements for its most recently completed financial year;

- (iii) one copy of the information circular of the Issuer in respect of its most recent annual meeting of shareholders that involved the election of directors or one copy of any annual filing prepared in lieu of that information circular, as appropriate; and
 - (iv) one copy of any other documents that are incorporated by reference into the preliminary short form prospectus or the short form prospectus and are not required to be provided under (i) to (iii) above; or
- (b) at any other time, one copy of any other documents referred to in (a)(i), (ii) and (iii) above, provided the Issuer may require the payment of a reasonable charge if the request is made by a person who is not a security holder of the Issuer.

Additional information including directors' and officers' remuneration and indebtedness, principal holders of the Issuer's securities, options to purchase securities and interest of insiders in material transactions, where applicable, is contained in the Issuer's information circular for its most recent annual meeting of shareholders that involved the election of directors, and additional financial information is provided in the Issuer's comparative financial statements for its most recently completed financial year.

Dated at Vancouver, British Columbia this 1st day of February, 2002.

VANTECK (VRB) TECHNOLOGY CORP.

Per: "Rodney N. Duncan"

Rodney N. Duncan, *President, Chief Executive Officer & Director*

Per: "Michael E. Iannacone"

Michael E. Iannacone, *Chief Financial Officer & Director*

SCHEDULE "A"

PINNACLE CASES Renewal and Expiry Dates

Title of application/patent	Appl. No. Patent No.	Country	Next Renewal Date	Expiry Date	Status
All vanadium redox battery	575247	AU	2 April 2002	2 April 2006	Registered
"	2724817	Japan	2 December 2002	2 April 2006	Registered
"	4786567	US	Renewal payments complete	12 January 2008	Registered
A flexible, conducting, plastic electrode a process for its production, and an all-vanadium redox battery using such electrodes	673003	AU	6 September 2002	6 September 2013	Registered
"	PI9307013-6	Brazil	6 September 2002	6 September 20013	Registered
"	2143751	Canada	6 September 2002	6 September 2013*	Application – Exam Requested
"	93918802.5	Europe	6 September 2002	6 September 2013*	Application – Under Examination
"	98112477.0	HK	6 September 2004	6 September 2013*	Application
"	506684/94	Japan	not payable until grant	not known until grant	Application - Exam Requested
"	700906/95	R.Korea	6 November 2003	16 September 2013	Registered
"	019994	Thailand	not payable until grant	not known until grant	Application
"	5665212	US	9 March 2005	9 September 2014	Registered
Stabilised electrolyte solutions, methods of preparation thereof and redox cells and batteries containing stabilised electrolyte solutions	696452	AU	17 November 2002	17 November 2004	Registered
"	95900573.7	Europe	17 November 2002	17 November 2014*	Application – Possible Appeal
"	98112479.8	HK	17 November 2004	17 November 2014*	Application
"	P-941972	Indonesia	not payable until grant	not known until grant	Application – Under Exam
"	510489/95	Japan	not payable until grant	not known until grant	Application – Exam Requested
"	PI9403081	Malaysia	not payable until grant	not known until grant	Application – Under Exam

(2)

Title of application/patent	Appl. No. Patent No.	Country	Next Renewal Date	Expiry Date	Status
"	PI20015372	Malaysia	not payable until grant	not known until grant	Divisional Application filed
"	94/9140	RSA	17 November 2002	17 November 2014	Registered
"	024519	Thailand	not payable until grant	not known until grant	Application – Exam Request Due by 4 March 2002
"	49389	Philippine s	not payable until grant	not known until grant	Allowed
"	1-2001-02016	Philippine s	not payable until grant	not known until grant	Divisional Application filed
"	6143443	US	7 May 2004	7 November 2017	Registered
"	09/624317 (Divisional)	US	not payable until grant	not known until grant	Application
High energy density vanadium electrolyte solutions, methods of preparation thereof and all- vanadiumredox cells and batteries containing high energy vanadium electr	704534	AU	3 May 2002	3 May 2016	Registered
"	2220075	Canada	3 May 2002	3 May 2016*	Application
"	96911853.8	Europe	3 May 2002	3 May 2016*	Application – Oral Proceedings 7/2/02
"	98110321.2	HK	3 May 2005	3 May 2016*	Application
"	306364	NZ	3 May 2003	3 May 2016*	Registered
"	08/945869	US	not payable until grant	not known until grant	Application – Under Examination

* Expiry dates given for a patent granted on these application.



British Columbia
Securities Commission

QUARTERLY AND YEAR END REPORT

BC FORM 51-901F (previously Form 61)

Freedom of Information and Protection of Privacy Act: The personal information requested on this form is collected under the authority of and used for the purpose of administering the *Securities Act*. Questions about the collection or use of this information can be directed to the Supervisor, Financial Reporting (604-899-6731), P.O. Box 10142, Pacific Centre, 701 West Georgia Street, Vancouver, BC V7Y 1L2. Toll Free in British Columbia

INCORPORATED AS PART OF:

☒ Schedule A
☐ Schedules B and C
(Place X in appropriate category.)

ISSUER DETAILS

NAME OF ISSUER

FOR QUARTER ENDED

DATE OF REPORT

YY/MM/DD

Vanteck (VRB) Technology Corp.

June 30, 2001

01/11/22

ISSUER'S ADDRESS

1650 – 999 West Hastings Street

CITY PROVINCE

POSTAL CODE

ISSUER FAX NO.

ISSUER TELEPHONE NO.

Vancouver, B.C.

V6C 2W2

604.669.1605

604.633.4367

CONTACT PERSON

CONTACT'S POSITION

CONTACT TELEPHONE NO.

Rodney N. Duncan

President

604.633.4367

CONTACT EMAIL ADDRESS

WEB SITE ADDRESS

Duneagle@telus.net

www.vanteckvrb.com

CERTIFICATE

The three schedules required to complete this Report are attached and the disclosure contained therein has been approved by the Board of Directors. A copy of this Report will be provided to any shareholder who requests it.

DIRECTOR'S SIGNATURE

PRINT FULL NAME

DATE SIGNED

YY/MM/DD

"Rodney N. Duncan"

Rodney N. Duncan

01/11/22

DIRECTOR'S SIGNATURE

PRINT FULL NAME

DATE SIGNED

YY/MM/DD

"Michael E. Iannacone"

Michael E. Iannacone

01/11/22

(Electronic signatures should be entered in "quotations".)

Consolidated financial statements of

**VANTECK (VRB)
TECHNOLOGY CORP.**

June 30, 2001, 2000 and October 31, 1999

VANTECK (VRB) TECHNOLOGY CORP.

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**Deloitte
& Touche**

Auditors' report

To the Shareholders of
Vanteck (VRB) Technology Corp.

We have audited the consolidated balance sheets of Vanteck (VRB) Technology Corp. as at June 30, 2001, 2000 and October 31, 1999, and the consolidated statements of loss and deficit and cash flows for the periods then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with Canadian generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these consolidated financial statements present fairly, in all material respects, the financial position of the Company as at June 30, 2001, 2000 and October 31, 1999 and the results of its operations and its cash flows for the periods then ended in accordance with Canadian generally accepted accounting principles.

(Signed) Deloitte & Touche LLP

Chartered Accountants

October 26, 2001

VANTECK (VRB) TECHNOLOGY CORP.
Consolidated statements of loss and deficit

	year ended June 30, 2001	8 months ended June 30, 2000	year ended October 31, 1999
	\$	\$	
Revenue			
Interest income	64,770	2,895	44
Expenses			
Bank charges	1,080	491	457
Consulting	402,473	55,757	16,500
Investor relations	59,941	3,500	-
Office and general	51,568	23,350	1,349
Professional fees	229,105	100,494	11,374
Regulatory fees	18,321	14,297	3,652
Rent	12,954	7,736	6,000
Shareholder communication	15,801	-	-
Transfer agent fees	6,214	3,824	3,324
Travel and accommodation	275,194	82,902	7,799
	1,072,651	292,351	50,455
Operating loss	1,007,881	289,456	50,411
Gain on settlement of debt	-	-	(15,333)
Write-off of accounts payable	-	-	(10,990)
Share of loss of Pinnacle VRB Limited	678,416	-	-
Net loss	1,686,297	289,456	24,088
Deficit, beginning of year	10,242,932	9,953,476	9,929,388
Related party transaction adjustment (Note 3)	1,180,683	-	-
Deficit, end of year	13,109,912	10,242,932	9,953,476

VANTECK (VRB) TECHNOLOGY CORP.
Consolidated balance sheets

	as at June 30, 2001 \$	as at June 30, 2000 \$	as at October 31, 1999
Assets			
Current assets			
Cash	1,528,935	58,032	2,877
Accounts receivable	3,454	4,722	512
Interest receivable	43,812	-	-
Share subscriptions receivable	13,500	-	-
Prepaid expenses	15,000	-	-
	1,604,701	62,754	3,389
Fixed assets (Note 4)	802,563	-	-
Investment in Pinnacle VRB Limited (Note 3)	2,379,736	-	-
Licensing rights	1,368,820	1,165,635	-
	6,155,820	1,228,389	3,389
Liabilities			
Current liabilities			
Accounts payable and accrued liabilities	100,080	108,984	94,528
Shareholders' equity (deficiency)			
Share capital (Note 5)	19,165,652	10,812,337	9,862,337
Special Warrants (Note 5)	-	550,000	-
Deficit	(13,109,912)	(10,242,932)	(9,953,476)
	6,055,740	1,119,405	(91,139)
	6,155,820	1,228,389	3,389

Approved by the Board

"Rodney N. Duncan".....
Rodney Duncan, Director

"Michael E. Iannacone".....
Michael Iannacone, Director

VANTECK (VRB) TECHNOLOGY CORP.

Consolidated statements of cash flows

	year ended June 30, 2001	8 months ended June 30, 2000	year ended October 31, 1999
	\$	\$	\$
Operating activities			
Net loss	(1,686,297)	(289,456)	(24,088)
Share of loss of Pinnacle VRB Limited	678,416	-	-
Gain on conversion of debt into share capital	-	-	(15,333)
Changes in non-cash operating working capital items			
Accounts receivable	1,268	(4,210)	1,576
Interest receivable	(43,812)	-	-
Share subscriptions receivable	(13,500)	-	-
Prepaid expenses	(15,000)	-	-
Accounts payable	(8,904)	14,456	38,567
	(1,087,829)	(279,210)	722
Financing activities			
Issue of common shares	2,726,815	-	-
Exercise of options	88,500	-	-
Exercise of Warrants	1,988,000	-	-
Issue of special Warrants	-	550,000	-
	4,803,315	550,000	-
Investing activities			
Purchase of fixed assets	(802,563)	-	-
Investment in Pinnacle VRB Limited	(1,238,835)	-	-
Annual licence fees	(203,185)	(215,635)	-
	(2,244,583)	(215,635)	-
Net cash inflow	1,470,903	55,155	722
Cash position, beginning of year	58,032	2,877	2,155
Cash position, end of year	1,528,935	58,032	2,877

Additional cash flow information:

Debt converted into share capital			
Accounts payable	-	-	203,178
Note payable	-	-	140,027
Issuance of common shares in exchange for investment in Pinnacle VRB Limited	3,000,000	-	-
Issuance of common shares as corporate	182,361	-	-
Issuance of common shares for licensing rights	-	950,000	-

VANTECK (VRB) TECHNOLOGY CORP.

Notes to the consolidated financial statements

periods ended June 30, 2001 and 2000

1. Incorporation and nature of the business

The Company was incorporated under the *Canada Business Corporations Act* by registration of its Articles of Incorporation on November 13, 1986 under the name Senn D'Or Inc. On August 27, 1993, the Company changed its name to Venoro Gold Corp. and subdivided its issued share capital on the basis of three common shares of Venoro Gold Corp. for each issued common share of Senn D'Or Inc. Effective December 3, 1997, the Company changed its name to New Venoro Gold Corp. and consolidated its share capital on the basis of eight common shares for one new common share. Effective May 1, 2000, the Company changed its name to Vantack (VRB) Technology Corp.

The Company is the holder of 100% of the issued capital of Vantack International Limited, a British Virgin Islands company incorporated on March 24, 2000 as "Harrisford International Holdings Limited" for the purpose of holding the Company's interest in the All Vanadium Redox Battery. Effective April 19, 2000, Harrisford International Holdings Limited changed its name to Vantack International Limited.

2. Significant accounting policies

The financial statements have been prepared in accordance with Canadian generally accepted accounting principles and include the following significant accounting policies:

Basis of presentation

The consolidated financial statements as at June 30, 2001 and 2000 include the accounts of Vantack (VRB) Technology Corp. and its wholly-owned subsidiary Vantack International Limited.

Investment

Investment in Pinnacle VRB Limited is accounted for using the equity method.

Fixed assets

Fixed assets are stated at cost and will be depreciated over their estimated useful on a basis to be determined by management.

Licensing rights

Licensing rights are stated at cost and will be depreciated over their estimated useful life on a basis to be determined by management.

3. Investment in Pinnacle VRB Limited

On January 19, 2001, the Company reached an agreement with its controlling shareholder, Federation Group Limited ("Federation"), to acquire its interest in the issued shares and options of Pinnacle VRB Limited ("Pinnacle") that in aggregate represented 19.99% of the then issued capital of Pinnacle. In exchange, the Company issued to Federation 3,000,000 treasury shares at a deemed price of \$1.00 per share.

On this date, the carrying value of the investment in Federation's books was approximately \$1,819,317 (AUD\$2,155,333).

VANTECK (VRB) TECHNOLOGY CORP.

Notes to the consolidated financial statements

periods ended June 30, 2001 and 2000

3. Investment in Pinnacle VRB Limited (continued)

Due to the fact that this transaction is of a related party nature, the investment must be recorded in the Company's books at the carrying value of Federation, i.e. \$1,819,317. The excess between the purchase price paid by the Company and the carrying value is \$1,180,683 and is recorded directly as a charge to deficit.

Subsequent to this date, the Company exercised all the acquired options for \$1,238,835.

4. Fixed assets

	<u>June 30, 2001</u>		<u>June 30, 2000</u>	<u>October 31, 1999</u>
	Accumulated Depreciation and Amortization	Net Book Value	Net Book Value	Net Book Value
<u>Cost</u>	<u>Cost</u>	<u>Cost</u>	<u>Cost</u>	<u>Cost</u>
\$	\$	\$	\$	\$
Cell stacks	698,167	-	698,167	-
Power supply	104,396	-	104,396	-
	802,563	-	802,563	-

VANTECK (VRB) TECHNOLOGY CORP.

Notes to the consolidated financial statements

periods ended June 30, 2001 and 2000

5. Share capital

Authorized

An unlimited number of common shares without par value

Common shares

	June 30, 2001		June 30, 2000		October 31, 1999	
	Number of shares	Amount	Number of shares	Amount	Number of shares	Amount
		\$		\$		\$
Outstanding, beginning of period	14,623,445	10,812,337	4,764,070	9,862,337	2,578,257	9,534,465
Settlement of debt	-	-	-	-	2,185,813	327,872
Shares issued by way of						
exchange offering prospectus (Note 5a)	2,400,000	1,077,000	-	-	-	-
Shares issued by way of brokered private placements (Note 5b)	2,000,000	1,874,815	-	-	-	-
Shares issued by way of non-brokered private placements (Note 5b)	325,000	325,000	-	-	-	-
Shares issued for investment in Pinnacle VRB Limited (Note 5b)	3,000,000	3,000,000	-	-	-	-
Shares issued as consideration for licensing rights acquired	-	-	10,000,000	950,000	-	-
Shares issued for corporate finance fee and finder's fee	549,028	-	-	-	-	-
- 50,000 (Note 5a)						
- 82,361 (Note 5b)						
- 50,000 (Note 5b)						
- 366,667 (Note 5c)						
Shares cancelled	-	-	(140,625)	-	-	-
Options exercised	165,000	88,500	-	-	-	-
Warrants exercised	3,924,333	1,988,000	-	-	-	-
Outstanding, end of period	26,986,806	19,165,652	14,623,445	10,812,337	4,764,070	9,862,337

VANTECK (VRB) TECHNOLOGY CORP.

Notes to the consolidated financial statements

periods ended June 30, 2001 and 2000

5. Share capital (continued)

- a) On July 26, 2000, the Exchange Offering Prospectus ("EOP") was completed by the Company on the Canadian Venture Exchange ("CDNX") to raise \$1,200,000 gross proceeds through the sale of 2,400,000 units of its securities at \$0.50 per unit. Each Unit consisted of one (1) common share of the Company and one (1) non-transferable common share purchase Warrant (the "Warrant"). Each whole Warrant entitles its holder to acquire one additional common share of the Company at any time until the expiry of twelve (12) months from the closing date of the Offering (the "Exercise Period") at \$0.75 during the first six months of the exercise period and \$1.00 for the next six-month period. The Company has the right to call the Warrants on 14 days written notice in the event the closing price of the shares on CDNX exceeds the then current exercise price by 50% for ten consecutive trading days and the aggregate number of the Company's shares traded on CDNX during the period is at least 250,000 shares. In addition, Pacific International Securities Inc. (the "Agent") was entitled to 50,000 Agents' shares and up to 360,000 Agents' Warrants.
- b) On January 19, 2001, the Company reached an agreement with Federation Group Limited ("Federation") to acquire from Federation its interest in the issued shares and options of Pinnacle VRB Limited ("Pinnacle") that in the aggregate represented 19.99% of the then issued capital of Pinnacle.

To acquire options and common shares of Pinnacle from Federation, which represented 19.99% of the issued share capital of Pinnacle, Vanteck issued 3,000,000 treasury shares to Federation at a deemed price of \$1.00 per share.

During the year ended June 30, 2001, the Company completed a brokered private placement through Pacific International Securities Inc. (the "Agent") and a non-brokered private placement. The total closed amount of the brokered private placement before commission was \$2,000,000 at a price of \$1.00 per unit ("Unit") and the total closed amount of the non-brokered private placement was \$325,000 at a price of \$1.00 per Unit. Each Unit consisted of one share and one non-transferable share purchase Warrant (2,000,000 Series "D" or "F" and 325,000 Series "C" or "E"). Each Warrant is exercisable over a period of one year from the respective closing dates (January 15, 2001 and February 7, 2001) at an exercise price of \$1.00. The Agent received a commission equal to seven and one half percent (7½%) on the funds raised on the brokered private placement, paid for by \$67,639 in cash and 82,361 in shares. In addition, the Agent also received non-transferable share purchase warrants (Series "G") that entitle the Agent to purchase up to 16% (being 320,000 common shares) of the brokered private placement amount for one year from the date of closing, at an exercise price of \$1.00. In addition, the Agent also received fifty thousand (50,000) Units as a corporate finance fee consisting of one common share and one share purchase warrant (Series "H").

Proceeds from the private placement have been used to exercise the options of Pinnacle, which were assigned to the Company from Federation.

As at June 30, 2001, the Company holds 19.99% of the issued capital of Pinnacle.

VANTECK (VRB) TECHNOLOGY CORP.

Notes to the consolidated financial statements

periods ended June 30, 2001 and 2000

5. Share capital (continued)

- c) On October 27, 1999, the Company paid a finder's fee incidental to the acquisition from Federation Resources N.L. through the issuance of 366,667 common shares of the Company.

- d) During the period ended June 30, 2000, the Company issued 5,000,000 common shares at a deemed price of \$0.18 and 5,000,000 common shares (the "Performance Shares") at a deemed price of \$0.01 as consideration for licensing rights acquired.

The foregoing 5,000,000 common shares were issued in substitution for 5,000,000 Special Warrants as contemplated in the original agreement. The 5,000,000 common shares were the subject of a hold period imposed by the British Columbia Securities Act and Rules which expired April 14, 2001. The Performance Shares are subject to share restrictions imposed by Local Policy 3-07 of the British Columbia Securities Commission and are held in an escrow established by an agreement dated March 14, 2000 and are subject to pro rata release equal to the amount of cumulative cash flow not previously applied towards release divided by the "earn-out price". The earn-out price was determined on the date of the closing of the Federation transaction as \$0.0841.

- e) Also, during the period ended June 30, 2000, the Company issued 1,333,333 Special Warrants at \$0.15 for a cash consideration of \$200,000 and 700,000 Special Warrants at \$0.50 for a cash consideration of \$350,000.

During the year ended June 30, 2001, each of the 1,333,333 Special Warrants was converted into one unit of securities of the Company, with each unit consisting of one common share and one Series "A" share purchase warrant, with each Warrant entitling the holder to acquire one additional share of the Company over a two-year period from closing at a price of \$0.30 in the first year and \$0.35 in the second year.

During the year ended June 30, 2001, each of the 700,000 Special Warrants was exercised for one common share of the Company.

VANTECK (VRB) TECHNOLOGY CORP.

Notes to the consolidated financial statements

periods ended June 30, 2001 and 2000

5. Share capital (continued)

Share purchase Warrants

		Year ended June 30, 2001				
		Outstanding at beginning of year	Issued	Exercised	Outstanding at year-end	Exercise price
						\$
Series "A"						
Warrants	(Note 5e)	-	1,333,333	(100,000)	1,233,333	0.35
						January 6, 2002
Series "B"						
Warrants	(Note 5a)	-	2,400,000	(1,435,200)	954,800	1.00
						July 26, 2001
Series "C"						
Warrants	(Note 5b)	-	225,000	-	225,000	1.00
						January 25, 2002
Series "D"						
Warrants	(Note 5b)	-	1,388,000	-	1,388,000	1.00
						January 25, 2002
Series "E"						
Warrants	(Note 5b)	-	100,000	-	100,000	1.00
						February 7, 2002
Series "F"						
Warrants	(Note 5b)	-	612,000	-	612,000	1.00
						February 7, 2002
Series "G"						
Warrants	(Note 5b)	-	320,000	-	320,000	1.00
						February 7, 2002
Series "H"						
Warrants	(Note 5b)	-	50,000	-	50,000	1.00
						February 7, 2002
Agents'						
Warrants	(Note 5a)	-	360,000	(345,800)	14,200	1.00
						July 26, 2001
Special						
Warrants	(Note 5e)	2,033,333	-	(2,033,333)	-	-
		2,033,333	6,788,333	(3,924,333)	4,897,333	

Each Warrant is convertible into one common share of the Company except for the Special Warrants as explained above.

VANTECK (VRB) TECHNOLOGY CORP.

Notes to the consolidated financial statements

periods ended June 30, 2001 and 2000

5. Share capital (continued)

	Number of options		
	2001	2000	1999
Outstanding, beginning of period	1,940,000	-	-
Options granted	225,000	1,940,000	-
Options exercised	(165,000)	-	-
Outstanding at year-end	2,000,000	1,940,000	-

The options expire as follows:

	Number of options
Exercisable at \$0.50 expiring May 5, 2005	1,790,000
Exercisable at \$0.90 expiring Dec 7, 2005	210,000
	<u>2,000,000</u>

6. Commitments

- a) On April 20, 2000, the Company entered into an agreement with Global Link Capital Corporation and Gregory Pearson, pursuant to which Global Link Capital Corporation through Mr. Pearson, has agreed to provide certain services to the Company in return for a monthly remuneration of \$3,500 plus out of pocket expenses.
- b) On March 3, 2000, the Company entered into an agreement with Highveld Steel, and Vanadium Corporation Limited (the "Heads of Agreement") regarding a strategic alliance with respect to the All Vanadium Redox Battery ("VRB"). Under the Heads of Agreement, Highveld, subject to Board approval, and the Company will initially form a 50:50 strategic alliance within Africa for the purpose of, among other things to: (i) review the feasibility of establishing a vanadium electrolyte manufacturing plant in South Africa primarily for the supply of vanadium electrolyte for VRBs installed within Africa; (ii) conducting further research and development work on increasing electrolyte concentrations (higher molarity); and (iii) developing the commercialization of the VRB within Africa.
- c) On July 20, 2000, the Company entered into an alliance agreement with TSI-Eskom, a division of Eskom (Pty) Ltd., for a trial demonstration of the Vanadium Energy Storage System which is expected to be completed in January 2002.

VANTECK (VRB) TECHNOLOGY CORP.

Notes to the consolidated financial statements

periods ended June 30, 2001 and 2000

7. Related party transactions

During the period ended June 30, 2001, the Company incurred consulting fees of \$120,000 (2000 - \$42,000) from certain directors and management companies controlled by certain directors, and professional fees of \$16,500 (2000 - \$7,250) to a director.

8. Income taxes

The Company has non-capital losses of \$1,798,975 available to reduce future taxable income. The benefits related to these losses expire as follows:

	\$
2002	627,980
2003	506,464
2004	232,672
2005	97,827
2006	50,411
2007	283,621

No recognition has been given in these financial statements to the potential tax benefits associated with these losses.

9. Subsequent events

On August 10, 2001 the Company announced the successful completion of the installation and commissioning of a Vanadium Redox Battery (VRB) in South Africa.

On July 20, 2001, the Company lodged its bidder's statement and offer document for the Company's takeover offer (1 Company's share for every 4 Pinnacle shares (1:4)) for all of Pinnacle VRB Limited (Pinnacle) ordinary shares with the Australian Securities and Investment Commission. As at October 26, 2001, the Company's interest in Pinnacle has increased to 33,379,519 shares or 58.66% of acceptances; this percentage is after deducting 3.1% of disputed acceptances that were credited from the acceptance register on October 17, 2001.

By July 26, 2001 all outstanding Series "B" and Agents' warrants were exercised and the Company received a total of \$969,000 therefrom.

VANTECK (VRB) TECHNOLOGY CORP.
QUARTERLY REPORT
For the Quarter Ended June 30, 2001

1. ANALYSIS OF EXPENSES

See Audited Statement of Loss and Deficit.

2. RELATED PARTY TRANSACTIONS

During the year ended June 30, 2001 consulting fees of \$120,000 and professional fees of \$16,500 were paid or are payable to certain Directors of the Company.

3.(a) SECURITIES ISSUED DURING THE QUARTER ENDED JUNE 30, 2001

- 259,000 common shares pursuant to the exercise of Series "B" share purchase warrants at \$1.00 for proceeds of \$259,000; and
- 15,000 common shares pursuant to the exercise of stock options at \$0.90 for proceeds of \$13,500.

3.(b) OPTIONS GRANTED DURING THE QUARTER ENDED JUNE 30, 2001

None

4.(a)&(b) AUTHORIZED AND ISSUED SHARE CAPITAL AS AT JUNE 30, 2001

<u>Class</u>	<u>Par Value</u>	<u>Authorized</u>	<u>Issued</u>	
Common	WPV	<u>Number</u> Unlimited	<u>Number</u> 26,986,806	<u>Amount</u> \$19,165,652

4.(c) OPTIONS AND WARRANTS OUTSTANDING AS AT JUNE 30, 2001

<u>Security</u>	<u>Number</u>	<u>Exercise Price</u>	<u>Expiry Date</u>
Series "A" Warrants	1,233,333	0.35	January 6, 2002
Series "B" Warrants	954,800	1.00	July 26, 2001
Series "C" Warrants	225,000	1.00	January 25, 2002
Series "D" Warrants	1,388,000	1.00	January 25, 2002
Series "E" Warrants	100,000	1.00	February 7, 2002
Series "F" Warrants	612,000	1.00	February 7, 2002
Series "G" Warrants	320,000	1.00	February 7, 2002
Series "H" Warrants	50,000	1.00	February 7, 2002
Options	1,790,000	\$0.50	May 9, 2005

	210,000	\$0.90	December 7, 2005
Agent's Warrants	14,200	\$1.00	July 26, 2001

4.(d) SHARES IN ESCROW AS AT JUNE 30, 2001

A total of 5,000,000 performance shares are held in escrow as at June 30, 2001.

5. DIRECTORS AND OFFICERS AS OF REPORTING DATE

Directors

Rodney N. Duncan
R. John Fraser
Michael E. Iannacone
Steven C. Kerr
Peter A. Stedwell

Officers

Rodney N. Duncan - President and Chief Executive Officer
Steven C. Kerr - Secretary
Michael E. Iannacone - Chief Financial Officer

**VANTECK (VRB) TECHNOLOGY CORP.
QUARTERLY REPORT
For the Quarter Ended June 30, 2001**

10. MANAGEMENT DISCUSSION AND ANALYSIS

Description of Business

The Company is engaged in the commercialization of the Vanadium Redox Battery ("VRB")/Vanadium Energy Storage System ("VESS") technology held under license from Pinnacle VRB Limited, Australia ("Pinnacle"). The license with Pinnacle, which was assigned to the Company by Federation Resources NL ("Federation") of Australia through a reverse takeover ("RTO"), provides Vanteck with all right, title and interest to exploit and utilize the technology within the Continent of Africa. The Company, as a result of the RTO, is a subsidiary of Federation. The technology was originally developed and patented by the University of New South Wales ("UNSW"), Australia. Pinnacle acquired in 1998 from Unisearch, the commercial arm of UNSW, all technology rights in the UNSW VRB technology.

The VRB is a unique patented electrochemical "Energy Storage" technology with technical performance characteristics and cost competitiveness against conventional energy storage technologies such as lead-acid and nickel-cadmium battery technologies. The VRB technology is most suited to stationary energy storage applications.

Stationary applications include power stations, the telecommunications sector (power back-up systems) and alternative energy generators such as wind farms. As electricity cannot be stored on a large scale, power stations for example, require expensive surplus generating and distribution capacity to meet peak demand. In the Power Industry sector the VRB is a new enabling technology that can effectively store electricity on demand. The VRB improves power reliability, power quality and will reduce costs for such applications as load leveling, peak shaving etc., as well as providing essential Uninterruptible Power Systems ("UPS"). The VRB technology is safe with low ecological impact. It uses conducting plastic electrodes and contains no heavy metals such as lead, nickel, zinc, cadmium, etc.

The VRB is referred to as a reduction/oxidation (redox) flow battery. Energy is stored chemically in two forms of ionic vanadium in acidic liquid electrolyte. The VRB consists of a number of flow cells (stacks).

The electrolyte is pumped from separate storage tanks into each of the flow cells. The two different forms of the electrolyte remain separated by a Proton Exchange Membrane ("PEM"). In doing so, one form of the ionic vanadium is oxidized and the other form reduced, the resulting current is collected by electrodes and available to an external circuit. The electrochemical reaction is reversible, so the VRB can be charged and discharged. The concentration of each ionic form of the vanadium electrolyte changes as the VRB is charged and discharged with electrical energy being converted to chemical energy and vice-versa.

The VRB technology is significantly enhanced through the Vanadium Energy Storage System ("VESS"). VESS integrates the VRB into a very practical energy storage system, wherein the design and operating characteristics of the VRB are optimized and integrated with automated intelligent control and operational management electronics. The VESS arrangement leverages the storage attributes of VRB technology.

Operations

As previously reported TSI/Eskom of South Africa has agreed to trial for purposes of Uninterruptible Power Supply ("UPS") an initial 250 kW – 520 kW hour constant power VRB connected to a 400 VAC line in Cape Town, South Africa along with a range of other power utility application tests. The TSI/Eskom demonstration test is to protect sensitive load equipment against short duration dips and line interruptions and to improve line power quality. The cell stacks for the TSI/Eskom unit have been purchased from Sumitomo Electric Industries Ltd. ("SEI") Japan. The other components, have been secured primarily in South Africa in conjunction with Vanteck's alliance partners namely Highveld Steel and Vanadium Corporation and TSI/Eskom. Project Coordination is being undertaken by Vanteck's primary technical consultants Telepower Australia.

The TSI/Eskom VRB/VESS unit is the first and largest system to be interpedently engineered, assembled and installed outside of Japan and will be the first independent trial of the VRB technology outside of Japan.

As part of Vanteck's commercialisation strategy for the VRB technology in South Africa and the African market Vanteck, as previously reported, has entered into a tripartite Heads of Agreement with TSI-Eskom and Highveld Steel and Vanadium Corporation Limited of Witbank, South Africa.

Highveld is a substantial steel and ferro-alloy producer and is the largest producer of vanadium in the world. (The Company, as reported in a previous news release, has a separate alliance agreement with Highveld).

Eskom is the fifth largest power utility in the world and the dominant South African power utility supplying approximately 95% of the country's electricity requirements, which amounts to more than half of the electricity generated on the African continent. Eskom has 26,461 kilometres of transmission lines, which span the entire country and also carry power to neighbouring countries. As a member of the Southern African Power Pool (SAPP), which consists of 12 national utilities, Eskom also supports the development of a southern African transmission grid to encourage cooperation and accelerate economic growth in the region.

The Vanteck, TSI, Highveld alliance has been formed for the purpose of among other things: (i) having TSI identify and host certain demonstration trial sites for Vanteck's Vanadium Redox Battery/Vanadium Energy Storage System; (ii) establishing through demonstration trials the further development of the technology as an energy storage system for the South Africa and the African market for which TSI operates; and (iii) providing a framework for the parties to bring together their particular strengths and credibility as well as their technical and operational resources with respect to the commercialization of the technology.

The formal launch and first public operational demonstration of the company's 250 kW – 520 kWh Vanadium Redox Battery ("VRB") and Vanadium Energy Storage System ("VESS"), installed for TSI-Eskom of South Africa at the University of Stellenbosch, Cape Town, South Africa was held on Friday October 26, 2001 at the University of Stellenbosch. Representatives from the Company, TSI-Eskom, Highveld Steel and Vanadium, and Telepower Australia were present at the formal launch.

VESS is a proprietary advancement of the basic VRB technology developed by the Company and Telepower Australia. VESS integrates the VRB into a flexible energy storage system through exploiting the attributes of the VRB by optimized automated intelligent control and operational management electronics. VESS allows practical energy storage for new applications not before thought cost effective or achievable with lead-acid technology as well as pending beneficial replacement options for existing DC power infrastructure. The TSI-Eskom VRB system is designed to show the versatile configuration and

operation of VESS, with the single installation demonstrating applications ranging from sub-second uninterruptible power supply ("UPS") ride-through capability through to power quality and emergency power back-up. The TSI-Eskom VRB-VESS system has been integrated with Eskom's new QuPS programmable inverter technology also demonstrated during the formal VRB-VESS system launch.

Acquisition of Pinnacle VRB Limited and Takeover Bid Status

On January 19, 2001, the Company reached an agreement with Federation Group Limited ("Federation") to acquire from Federation its interest in the issued shares and options of Pinnacle VRB Limited ("Pinnacle") that in the aggregate represented 19.99% of the then issued capital of Pinnacle.

Pinnacle is an Australian Stock Exchange ("ASX") listed company which holds all of the Intellectual Property and Patent rights to the Vanadium Redox Battery ("VRB") technology subject to Licences with Sumitomo Electric Industries ("SEI"), Mitsubishi Chemical Corporation/Kashima Kita Power Corporation ("MCC/KK") and Vantek, which holds all right, title and interest to the technology for the continent of Africa.

Mr. Rodney Duncan and Mr. John Fraser were elected to the Board of Pinnacle VRB Limited ("Pinnacle") at the Pinnacle general meeting of shareholders held in Melbourne, Australia on October 22, 2001 as the representatives of the Company. The Pinnacle Board now consists of Mr. Rodney Duncan, Mr. John Fraser, Mr. John Anderson and Mr. Peter Williams.

The Company filed a listing application to list its shares on the ASX on October 31, 2001. This listing application is pending ASX review. Pursuant to the Company's 1 Vantek share for every 4 Pinnacle shares (1:4) unconditional bid for all of the issued ordinary shares in Pinnacle VRB Limited it lodged with the Australian Securities and Investment Commission ("ASIC") under section 650D of the Australian Corporations Act a Notice of Extension dated November 1, 2001, which extends the company's takeover bid for Pinnacle from November 1, 2001 to the day that is 7 days after the Company gives written notice to ASX that;

- (1) Vantek's ordinary shares are admitted to quotation by ASX; or
- (2) Vantek has withdrawn its application for quotation; or
- (3) Vantek's application for quotation has been refused.

The Company's interest in Pinnacle stands at 34,147,941 shares or 59.09% based on current processed acceptances as at 5:00 p.m. November 1, 2001 (Melbourne time).

Financings

During the quarter the Company received \$272,500 via the exercise of 259,000 Series "B" warrants at \$1.00 per share for proceeds of \$259,000 and the exercise of 15,000 stock options at \$0.90 per share for \$13,500.

Subsequent Event

Subsequent to the end of the quarter and by July 26, 2001 all outstanding Series "B" and Agents' warrants were exercised and the Company received a total of \$969,000 therefrom.

Investor Relations Activities

Investor relations activities for the Company are primarily carried out by Global Link Capital Corporation (Mr. Gregory T. Pearson) under an agreement dated April 20, 2000, as approved by the Canadian Venture Exchange. Terms of the agreement provide for a monthly payment of \$3,500 plus GST and reimbursement of approved expenses.